## **Emotions in attacker-defender conflicts**

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**Abstract:** The distinction between attackers and defenders might help to refine the understanding of the role of emotions in conflicts. Here we briefly discuss differences between attackers and defenders in terms of appraisals, action tendencies, emotional preferences, and brain activities. Finally, we outline how attackers and defenders may differ in their response to emotion-based interventions that aim to promote conflict resolution.

In tense situations, emotions emerge that influence conflicts, shaping decision making and behavior (Bar-Tal, Halperin, & De Rivera, 2007; Halperin, 2016). We propose that the distinction between attackers and defenders in asymmetric conflicts, as addressed by De Dreu and Gross, may inspire a new line of research that will help broaden the understanding of emotional processes and their implications in intergroup conflicts. More specifically, this commentary focuses on the impact that the role of being an attacker or a defender has on emotional experiences, appraisals, actions tendencies, emotional preferences, brain activities, and responses to emotion-based interventions.

Appraisal theory offers a useful framework to shed light on why the perception of being an attacker or defender could have a differential impact on emotional experiences and action tendencies: it proposes that distinct combinations of cognitive appraisals (i.e., evaluations of an event) influence the emotions that are experienced (Sander, Grandjean, & Scherer, 2018; Scherer & Moors, 2019). According to De Dreu and Gross, superiority and overconfidence are more typical for attackers, which would suggest appraisals of high certainty and high control. These appraisals in turn are usually related to feelings of anger, pride, and contempt (Fontaine, Scherer, Roesch, & Ellsworth, 2007; Lerner & Keltner, 2000). For instance, anger predicts lower risk perception (Lerner & Keltner, 2000, 2001), a bias that may facilitate competition in attackers. Conversely, defenders are described in the target article as vigilant. This could be associated with appraisals of low certainty and low control, which are typical of the emotion of fear (Lerner & Keltner, 2000). Fear has been shown to elicit the perception that events are more risky (Lerner & Keltner,

2000, 2001), which may explain the behavioral avoidance in defenders described in the target article.

In addition to distinct appraisals and action tendencies, attackers and defenders probably also differ in their emotional preferences (i.e., what people are motivated to feel). These differences might be explained by the instrumental approach to emotion (Tamir, 2009, 2016) as well as by the motivation to feel emotions congruent with the self-image of being an attacker or defender. First, in line with the instrumental approach to emotion (Tamir, 2009, 2016), groups prefer to experience particular emotions in order to attain their goals in contexts such as conflicts (Porat, Halperin, & Tamir, 2016). In the target article, defenders and attackers are described as having distinct group-based goals: whereas attackers aim to change the status quo, defenders aim at maintaining it. Thus, defenders may benefit from the motivation to feel fear because feeling threatened may reinforce ingroup affiliation (Bar-Tal, 2013), inciting them to invest more resources in collectively protective behaviors. In contrast, attackers may be more motivated to feel anger, which is associated with overconfidence and hostile action tendencies, which in turn facilitate fight behaviors. Moreover, overconfidence may be dysfunctional for defenders, as it may reduce their vigilance, thereby giving rise to devasting attacks.

Pertaining to brain functions, De Dreu and Gross argue that attack should recruit prefrontal top-down control more than defense does. This may seem contradictory to previous research showing that prefrontal brain structures and activities, which are also important for emotion regulation (Davidson, Putnam, & Larson, 2000), are related to less

aggression and punishment (Giancola, 1995; Klimecki, Sander, & Vuilleumier, 2018; Nelson & Trainor, 2007; Raine & Yang, 2006). Factors that may matter in this context are the party's engagement in aggressive versus conciliatory behavior, as well as the intensity and temporal dynamic of a given conflict. It may thus be that defenders also show pronounced prefrontal brain activations when engaging in forgiveness behavior. In terms of intensity, usually more stressful situations are associated with reduced prefrontal top-down control in the brain and more activation in limbic structures (Arnsten, 2009), which suggests reduced prefrontal activations in attackers and defenders during periods of intense and stressful conflicts. Whether conflict behavior and related brain activations in attackers and defenders can be influenced by interventions, and to what extent, remains to be tested.

Potential interventions that have been shown to provide beneficial effects in conflicts by changing emotions are reappraisal training (Halperin, 2014; Halperin, Porat, Tamir, & Gross, 2013), indirect emotion regulation strategies (Halperin, Russell, Trzesniewski, Gross, & Dweck, 2011), and compassion training (Cernadas Curotto, Halperin, Sander, & Klimecki, 2019). In light of the discussed differences between attackers' and defenders' emotions, certain emotion-based interventions might be more efficient, depending on whether people identify as an attacker or defender. Reappraisal is considered an emotion regulation strategy and consists of reinterpreting the situation, which triggers an emotion, to modulate its emotional impact (Gross, 1998, 2001). For attackers, reappraisal training could therefore be used to reinforce the perception of the advantages of the status quo in order to reduce their anger and their motivation to attack. In defenders, however,

reappraisal training might be less efficient, as experiences of fear may interfere with the efficient use of reappraisal strategies. Besides reappraisal training, indirect emotion regulation can have beneficial effects for both attackers and defenders, as it can be tailored to target the appraisals that are constitutive of the most dominant emotions for each group (Halperin, 2016). In defenders, this intervention may increase beliefs of defensive capabilities, thereby reducing their fear. In attackers, indirect emotion regulation may reduce contempt by altering the feeling of superiority. Another candidate for promoting conflict resolution could be compassion training, as it has the potential to overcome intergroup biases by cultivating benevolence toward all beings (Klimecki, 2019). Compassion is defined as the feeling of concern for others' suffering, which is accompanied by the motivation to help (Goetz, Keltner, & Simon-Thomas, 2010). Research from our team shows that compassion training can improve interpersonal relations in conflicts (Cernadas Curotto et al., 2019). As the target article described attackers with stronger "other concern" as investing less in attacks than that shown by attackers with lower other concern, strengthening compassion – which is conceptually close to other concern - may be a beneficial strategy for reducing attacks. Future research is needed to investigate these assumptions.

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