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Citation	Cikara, Mina. 2018. Pleasure in response to out-group pain as a motivator of intergroup aggression. In Atlas of Moral Psychology, eds. K. Gray & J. Graham. New York: Guilford Press.
Citable link	<a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:37093456">http://nrs.harvard.edu/urn-3:HUL.InstRepos:37093456</a>
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## Pleasure in response to out-group pain as a motivator of intergroup aggression

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### Abstract

If humans are innately good, cooperative, fair, and averse to harming one another, why does widespread intergroup violence continue to afflict society? Several factors contribute to fomenting aggression between groups; here I focus on the role of pleasure in response to out-group pain.

Humans reliably divide their social world into *us* and *them*. This fundamental tendency is the source of humanity's greatest triumphs but also its greatest tragedies. Banding together allows people to satisfy their own material and psychological needs (Allport, 1954), and to develop norms and practices that bolster our most cherished social institutions (e.g., Keltner, 2009; Tomasello, 2009). However, group living also results in violence and conflict between groups (Cohen & Insko, 2008). According to one statistic, over 200 million people have been killed in acts of genocide, war, and other forms of group conflict in the last 100 years (Woolf & Hulsizer, 2004).

It is difficult to reconcile these statistics on intergroup violence with the well-documented moral prohibitions against harm that guide most people's behavior most of the time. In lab studies, people are willing to pay more to prevent harm to others relative to themselves (Crockett, Kurth-Nelson, Siegel, Dayan, & Dolan, 2014); they even exhibit physiological aversion responses when the harm they are causing isn't real (e.g., shooting a person with a fake gun; Cushman, Gray, Gaffey, & Mendes, 2012). These results are not unique to the lab setting or to harming innocent strangers. Analysis of combat activity during the Civil War and World War I reveal that soldiers would shoot over the heads of enemy combatants. Thus, harm aversion exerts its effects even in war (Grossman, 1996). So how *do* people eventually overcome their aversion to doing harm in order to participate in intergroup aggression? Several factors are critical for fomenting intergroup violence including moral disengagement, moral justification, and dissonance reduction (for an excellent review and theoretical integration, see Littman & Paluck, 2014). Here I focus on another complementary mechanism: pleasure in response to out-group pain.

### Key terms: Empathy, Schadenfreude, and Harm

Empathy refers to the collection of affective and cognitive processes that allow people to recognize emotional experiences in others, experience matched sensations and emotions, and move to alleviate those others' suffering (Batson, 2009). However, people do not empathize with all others all of the time (nor would it be adaptive if they did). Though it is not often conceptualized as an intergroup emotion, empathy is reliably moderated by group membership; people feel less empathy for out-group relative to in-group members. We refer to this difference as the *intergroup empathy bias* (Cikara, Bruneau, & Saxe, 2011; Cikara, Bruneau, Van Bavel, & Saxe, 2014). People self-report this bias and exhibit decreased (and sometimes absent) physiological responses associated with empathy when witnessing out-group relative to in-group members in physical or emotional pain (see Cikara & Van Bavel, 2014 for a recent review). This bias matters because the absence of empathy implies a reduction in motivation to help those in pain.

What is left in the absence of empathy? Apathy: indifference towards out-group suffering. However it is important to note that while apathy may engender neglect, it should not promote active harm. An alternative to apathy is the opposite of empathy: pleasure in response to others' misfortunes—Schadenfreude—or displeasure in response to others' triumphs—

Glückschmerz. In contrast to apathy, pleasure and pain are feasible motivators of overt intergroup aggression.

Feeling pleasure in response to out-group misfortune is arguably a natural if not adaptive response in zero-sum environments: negative outcomes for “them” indicate positive outcomes for “us,” and are therefore pleasurable. However, experiencing Schadenfreude as a passive observer of out-group members’ pain is very different from being responsible for *causing* out-group members’ pain. Here I propose that intergroup Schadenfreude is a natural response that supports the learning of an otherwise repugnant behavior: actively doing harm to others. If observing out-group members’ pain is consistently accompanied by feeling pleasure, people may learn over time to endorse and *do* harm to individual out-group targets.

### Relevant Debates

In-group love versus out-group hate as motivators of intergroup aggression. Social categorization is fundamental for group living. It guides decisions about who to approach versus avoid and allows us to generalize our existing knowledge about social groups to novel targets (Bruner, 1957). Social categorization also requires that people categorize themselves (Tajfel & Turner, 1979). Shifting from an individual (“I” or “me”) to collective (“we” or “us”) self-concept is called social identification (Ellemers, 2012). Greater identification engenders greater in-group favoritism, which in turn reinforces the boundaries between “us” and “them” (Hewstone, Rubin, & Willis, 2002; Tajfel & Turner, 1986; for review see). Indeed, in the absence of conflict, in-group love is a better predictor of inequitable resource allocation and intergroup bias than out-group hate is (Brewer, 1999). In-group love, however, is not sufficient to ignite intergroup conflict. This is why most out-groups elicit indifference rather than aggression.

Instead, intergroup aggression is driven by competition over resources and incompatibility between groups’ goals: consider, for example, the violence against Jews in pre-war Europe, or brawling among rival sports fans (Campbell, 1965; S. T. Fiske & Ruscher, 1993; Sherif, Harvey, White, Hood, & Sherif, 1961; Sidanius & Pratto, 1999). Competition transforms indifference to emotions such as fear, hatred, and disgust (Cuddy, S. T. Fiske, & Glick, 2007; Mackie & Hamilton, 1993). These emotions are then used to justify overt discrimination against out-groups and their members (Brewer, 2000). Out-groups are dehumanized, or worse yet demonized, which places them beyond the boundary of justice that applies to the in-group (Bar-Tal, 1989; Opatow, 2005; Staub, 2001).

The Stereotype Content Model makes specific predictions about which social groups elicit apathy versus disgust versus threat (Fiske, Cuddy, Glick, & Xu, 2002). People harbor disgust for groups that are stereotyped as competitive (or exploitative) and low-status (e.g., drug addicts, welfare recipients), whereas people are threatened by groups that are stereotyped as competitive but high-status (e.g., wealthy professionals, model minorities). We have run several experiments to see whether “in-group love” was sufficient to explain moral exclusion and harm out-groups (in which case all out-groups should be treated equivalently) or whether our results were better explained by out-group hate (which should specifically target competitive out-groups). In one experiment, we used the famous Trolley Dilemma to investigate whether stereotypes motivated people to value some social groups’ lives over others (Cikara, Farnsworth, Harris, & Fiske, 2010). On each trial we assigned different stereotyped targets’ photos to the “sacrificed” and “saved” roles; we asked participants to indicate how morally acceptable it was for a third-party named Joe to push one target (e.g., drug addict) off a bridge to save five others (e.g., five students). Not surprisingly, participants reported it was most acceptable to save cooperative, high-status groups (e.g., Americans and students). More importantly, participants did not value different kinds of out-group members’ lives equivalently. It was most morally acceptable to sacrifice, and least acceptable to save competitive, low-status (i.e., disgust) targets. Specifically, 84% of our respondents said it was acceptable for Joe to push competitive, low-status targets off a bridge to save five cooperative, high-status targets. This finding is remarkable when

juxtaposed with the finding that 88% of people say this same act is unacceptable when the targets remain unidentified (Hauser et al., 2007).

Critically, we have found participants' endorsement of harm shifts to threatening out-groups when the harm is not fatal. In one experiment we asked participants to imagine that they had to decide whether to assign one person to receive painful electric shocks in order to spare another four people. On each trial we assigned different stereotyped targets' photos to the "scapegoat" role. This time, participants said it was most acceptable to harm competitive, *high-status* targets (e.g., wealthy women, business men; Cikara & Fiske, 2011). Thus it appears in-group love is not specific enough to predict which social groups will be targeted for aggression. Instead, the specific out-groups and their associated stereotypes matter.

Banality of evil or virtuous violence? Participation in intergroup violence requires that people behave in ways that they would otherwise find aversive. The first several decades of social psychology were largely dedicated to understanding the circumstances that enable people to engage in antisocial behavior. For example, we know that harmful behavior is more likely to arise when individuals' sense of personal responsibility is mitigated by obedience to authority (Milgram, 1965), anonymity (Diener, 1979; Festinger, Pepitone, & Newcomb, 1952), or diffusion/displacement of responsibility (Bandura, 1999) and when the salience of individuals' own moral standards is low (Prentice-Dunn & Rogers, 1989). While they are relevant, none of these explanations is unique to intergroup contexts. Even in the absence of an out-group, these circumstances could lead individuals in crowds to engage in immoral behavior (e.g., out of individual self-interest). More importantly, these explanations largely adhere to the "banality of evil" perspective (Arendt, 1976). By these accounts people are not actively choosing to act immorally so much as they are reflexively responding to the pressures exerted by the situation.

An important alternative is that perpetrators of intergroup harm explicitly reframe and/or justify their behavior as serving a greater good (Pinter & Wildschut, 2010). For example, participants rate torture as more acceptable when their own versus other countries engage in it (Tarrant, Branscombe, Warner, & Weston, 2012). High identification and coordinated behavior with the in-group are critical conditions for acting on behalf of a group in general, and for intergroup aggression in particular (Reicher, Haslam, & Rath, 2008; Cikara & Paluck, 2013). As collective identities become "fused" with one's individual identity, people may act as representatives of the group rather than as individual agents (Ellemers, 2012), allowing group goals to supplant individual goals. If the in-group's goals require harming the out-group, people who are highly identified with the group may deliberately choose to endorse or do harm because they believe it is the right thing to do (A. P. Fiske & Rai; Reicher et al., 2008). Said another way, our moral codes may promote fairness and prohibition against harm in interpersonal contexts, but we bring different rules and expectations to bear on competitive intergroup interactions (Cohen, Montoya, & Insko, 2006; Rhodes & Chalik, 2013). This is an important perspective because intergroup Schadenfreude may be one important cue people use to rationalize the acceptability of harming out-group members. A complete account of intergroup aggression would have to integrate the contributions of lower-level affective signals (absence of negative and/or presence of positive affect) as well as higher-order cognitions reflecting on those signals.

### **Intergroup Schadenfreude as a motivator of intergroup aggression**

Though several conditions predict Schadenfreude (see Smith, Powell, Combs, & Schurtz, 2009 for a review) I focus on the effect of intergroup competition, here (Cikara & Fiske, 2013). In order for Schadenfreude to qualify as an intergroup emotion, people must feel it *on behalf of their group*. However, people only appraise events from an intergroup perspective when they are highly identified with the in-group (Mackie, Davis, & E. R. Smith, 2000), therefore Schadenfreude should correlate with group identification. Consistent with this prediction, college basketball fans' identification with their team predicted greater Schadenfreude in response to a rival player's injury (Hoogland et al., 2014). In another study, hardcore soccer fans smiled more

intensely when they watched a rival soccer team miss a penalty kick relative to when they watched their favored team make a goal (Boecker, Likowski, Pauli, & Weyers, 2014). In both of these examples, rivals' misfortunes are only cause for pleasure because fans identified strongly with their favored team. Of course, both of these studies focus on (a) groups with a history of rivalry and (b) Schadenfreude in response to events that are related to the basis for that rivalry (i.e., asking sports fans how they feel about sports-related outcomes). One open question is how much information is necessary to evoke intergroup Schadenfreude? Is a history of rivalry required? Does Schadenfreude extend to events that are irrelevant to the intergroup competition? One way to address these questions is to examine the minimal conditions under which participants exhibit intergroup Schadenfreude.

In a series of recent experiments, we found that participants exhibited greater Schadenfreude (and Glückschmerz) toward competitive out-group relative to in-group members only minutes after being assigned to novel groups in competition for \$1 (Cikara et al., 2014). In the first experiment, we assigned participants to novel groups—the Eagles or the Rattlers—purportedly based on their personalities (in reality we randomly assigned them to teams). We also manipulated whether groups were competitive, cooperative, or independently working toward winning a \$1 bonus. We told participants that we would award bonuses depending on participants' and their team's performance in an upcoming problem solving challenge. In the competitive condition, in which only one team could win the bonus, participants reported greater Schadenfreude toward out-group relative to in-group members, even though the misfortunes were irrelevant to the upcoming competition (e.g., "Brendan accidentally walked into a glass door."). Intergroup Schadenfreude was attenuated when groups worked independently for the bonus and eliminated when groups were told they were going to work together to earn the bonus. We included unaffiliated targets as a baseline in a second experiment, including only the competitive condition. We found that participants responded to unaffiliated targets (people who did not fit the profile of either an Eagle or a Rattler) the same way they responded to in-group targets. These results indicate that rather than uniquely shielding the in-group from Schadenfreude, people reserve Schadenfreude only for competitive out-groups (Cikara et al., 2014). It is worth noting that using novel groups has the added benefit of controlling for pre-existing negative attitudes, resentment regarding the out-group's past successes (Hareli and Weiner, 2002), and perceptions that past success was ill gotten (Feather and Sherman, 2002).

These effects also emerge in more subtle social contexts. For example, we have found that people smile more when targets who are merely stereotyped as competitive (e.g., an investment banker) experience bad events (relative to good events; Cikara & Fiske, 2012). Together, these results indicate that a target can evoke these malicious emotional responses in the absence of any personal history or direct contact with the perceiver, due only to their group membership and its associated stereotypes.

Thus, Schadenfreude appears to be a prepared or "natural" response in contexts that are or are perceived as zero-sum. If a threatening out-group is unhappy, "we" are pleased; no learning is required. Remember, however, that experiencing pleasure in response to the observation of out-group harm is very different from becoming the first person agent of harm. Given that group survival may require some members to harm out-groups on behalf of the in-group, one intriguing possibility is that Schadenfreude motivates participation in intergroup aggression by *teaching* people to overcome the aversion to harming out-group members.

Insights from cognitive neuroscience. Many regions of the brain are implicated in encoding and representing reward, but the ventral striatum (VS) is associated specifically with reinforcement learning. By many accounts, this region supports learning stimulus-value associations and acquiring predictive value representation in the service of guiding behavior (O'Doherty, 2004). In other words, this region supports learning from our experience so we can repeat behaviors that yield rewards. There are now several fMRI studies investigating Schadenfreude, all of which find that greater VS engagement is correlated with greater

Schadenfreude (e.g., Singer et al., 2006; Takahashi et al., 2009). This Schadenfreude/VS association generalizes to intergroup contexts. For example, baseball fans watching their favored team compete with a rival report pleasure and exhibit activity in VS when watching their own team do well and when watching rivals fail (even against a lower ranked team, the Baltimore Orioles; Cikara, Botvinick, & Fiske, 2011). These findings extend to contexts in which victims are merely associated with the rival team. Soccer fans exhibited VS activity when watching a rival team's *fan* receive a painful electric shock (Hein et al. 2010). In neither case are participants in direct competition. Instead, out-group failure and pain take on a positive value by virtue of participants' affiliation with their favored team.

These studies provide only correlational evidence but they suggest an intriguing possibility: that the capacity for intergroup aggression may have developed, in part, by appropriating basic reinforcement-learning processes and associated neural circuitry in order to overcome harm aversion. Again, these results are correlational, but greater VS response to a rival's suffering in the context of the baseball and soccer studies described above predicted an increased desire to harm rival team fans (Cikara et al., 2011) and a decreased willingness to relieve a rival fan's pain (by accepting a proportion of the pain for oneself; Hein et al., 2010). These data implicate both the VS's valuation function—evaluating out-group harm as positive—but also its motivation function—learning to select behaviors that harm the out-group and associated individuals. They also support the prediction that the pleasure/harm association generalizes to individuals merely associated with the teams under consideration.

### Implications and Future Directions

It is critical to understand failures of empathy and Schadenfreude as they unfold between groups (as opposed to individuals) because intergroup contexts significantly increase opportunities for violence. First, harm can be justified as being morally necessary in the absence of any personal grievance (e.g., in defense of the in-group and its values; A. P. Fiske & Rai, 2014; Reicher et al., 2008). Second, the pleasure-pain association generalizes to entire groups; individuals who have done nothing to provoke violence become targets by virtue of their affiliation with a competitive, threatening out-group.

One outstanding question is whether increased willingness to harm out-group members predicts increased identification with the in-group. For example, Littman (2015) finds that ex-combatants in Uganda and Liberia who were abducted by the Lord's Resistance Army (LRA) as youths and forced to harm loved ones on its behalf, are more highly identified with the LRA than abducted youths who were not forced to harm loved ones. One possibility is that the pleasure of doing out-group harm may further reinforce group identification, creating a self-perpetuating cycle of collective violence (Littman & Paluck, 2014). This is a somewhat provocative prediction because it runs counter to the prediction made by cognitive dissonance theory. On an over-justification account (Deci, Koestner, & Ryan, 1999), *decreased* Schadenfreude and *increased* harm aversion would predict greater identification with the out-group, because participants have to overcome greater psychological barriers in order to do harm. Alternatively, the presence of positive affect in response to doing harm could also be a source of dissonance. We are presently running studies to adjudicate among these hypotheses.

Finally, it would be irresponsible to refrain from reiterating that participation in intergroup aggression is a multiply determined phenomenon with many causes and consequences. Intergroup competition, group identification, and moral justifications are all motivators of intergroup aggression (at least in humans). However, linking out-group aggression to reinforcement-learning expands the reach of our research not only to other areas of scientific inquiry (e.g., behavioral neuroscience; cognitive neuroscience; economics; biology) and other model organisms (e.g., rodent and primate models), but also to political and educational institutions with the power to make and implement policy. Ultimately, a better understanding of *all* the mechanisms promoting intergroup aggression will inform best practices for defusing it.

### Footnotes

<sup>1</sup>This chapter is based on an article the author wrote for Current Opinion in Behavioral Science.

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