

Intergroup Failures of Empathy 1

Corresponding Author:

Mina Cikara

Psychology Department

Princeton University

Princeton, NJ 08540

Voice: 609.258.9157

Fax: 609.258.1113

email: mcikara@princeton.edu

Full text word count: 2,499

Running head: FAILURES OF EMPATHY

Us and Them: Intergroup Failures of Empathy

Mina Cikara¹

Princeton University

Emile G. Bruneau

Massachusetts Institute of Technology

Rebecca R. Saxe

Massachusetts Institute of Technology

People are often motivated to increase others' positive experiences and to alleviate others' suffering. These tendencies to care about and help one another form the foundation of human society. When the target is an outgroup member, however, people may have powerful motivations *not* to care about or help 'the other'. From this perspective, empathic responses are rare and fragile; it is easy to disrupt the chain from perception of suffering, to motivation to alleviate the suffering, to actual helping. We highlight recent interdisciplinary research demonstrating that outgroup members' suffering elicits dampened empathic responses as compared to ingroup members' suffering. We consider an alternative to empathy in the context of intergroup competition: Schadenfreude—pleasure at the other's pain. Finally, we review recent investigations of intergroup conflict interventions that attempt to increase empathy for outgroups. We propose that researchers across the range of psychological sciences stand to gain a better understanding of the foundations of empathy by studying its limitations.

Key words: empathy, Schadenfreude, intergroup conflict, competition

A loved one loses their parent to cancer; on television, a football player breaks his leg in a tackle; in the newspaper, a mother cradles the body of her injured child on the other side of the world. How do people react when others are in distress? Much of the time, we feel pain or sadness in response to another's suffering. A key component of this response is the suite of cognitive and affective capacities called empathy (Batson, 2009): people recognize emotional experiences in others, experience matched sensations and emotions, and are motivated to alleviate the other's suffering, which frequently results in helping behaviors.

Often, though, we are likely to feel no pain, no sadness, and no motivation to help. Failures of empathy are especially likely if the sufferer is socially distant, for example, a member of a different social or cultural group. We often fail to detect such outgroup members' emotional experiences or perceive them in substantially distorted ways, and are only weakly, if at all, motivated to reduce their suffering. In fact, depending on the victim, we may feel secretly pleased about their misfortunes. Examining failures of empathy at the intergroup level is particularly important because intergroup conflicts engender significantly more aggression than interpersonal interactions (Meier & Hinsz, 2004). Although interpersonal morality prohibits people from harming others, engaging in violence on behalf of the ingroup is accepted in times of group conflict (Cohen, Montoya, & Insko, 2006). Dampened or absent empathic responses may lead to indifference toward outgroup suffering, and may even facilitate further harm against outgroups.

Here we take an interdisciplinary look—including affective, behavioral, physiological, and neural data—at intergroup empathic failures. We incorporate recent investigations of the neurobiological mechanisms of dampened and disrupted empathy because these mechanisms

are both a proximate cause of pro and antisocial behaviors and a potential future target of interventions. In the second section we consider potential negative alternatives to empathy (i.e., Schadenfreude), in the context of intergroup competition. Because feeling pleasure in response to others' pain is often socially unacceptable, people may feel uncomfortable or be unable to respond naturally in experimental settings. Using indirect measures such as facial electromyography and fMRI helps to circumvent some of the hurdles associated with measuring socially undesirable emotions and behaviors. Finally, we discuss some of the recent literature on intergroup conflict interventions that aim to increase intergroup empathy. While increased empathy can facilitate positive attitudes and prosocial behavior toward outgroups, there are circumstances in which empathy can backfire, further highlighting the importance of understanding when and why intergroup empathy breaks down.

DAMPENED AND DISRUPTED EMPATHY FOR OUTGROUPS

Empathy is generally recognized as a central component of the human condition; because it promotes prosocial behavior, it is an essential aspect of human social life. Beginning in infancy, people are affected by another's suffering: they 'step into the other person's shoes', 'feel their pain' and are motivated to help (Batson, 2009). One popular theory suggests that (in the absence of pathology), empathic responses arise out of an automatic, universal mechanism in the human brain that detects another person's experience and activates a matching experience in the observer (Preston & de Waal, 2002). In this view, shared neural circuits provide a direct functional bridge between first- and second-person experiences (Decety & Ickes, 2009). Seeing another human being in pain, observers must feel the other's pain.

We know, however, that adults with normal empathic capacity also frequently fail to respond to another's suffering. This may be because people are less likely to detect and attend to another's suffering when the victim is distant in space, time, kinship, or across racial, political, or social group boundaries (Batson & Ahmad, 2009). Empathy is even fragile between minimal groups—groups in which the boundary is arbitrary—such that children randomly assigned to groups (e.g., the 'red team' or the 'blue team') show greater empathy for ingroup members than for outgroup members who are socially rejected (Masten, Gillen-O'Neel, & Brown, 2010).

Recent studies are beginning to unpack the physiological and neural underpinnings of these empathic failures. In general, people show dampened, or even absent "matching" neural and physiological responses when witnessing an outgroup member in physical pain. For example, Black and White participants show "empathic resonance" (i.e., sensorimotor contagion, indexed by evoked motor potentials in matched hand muscles, following transcranial magnetic stimulation of motor cortex) when watching an ingroup member's hand (or even an artificially colored, purple hand) being pricked by a pin, but this response is *absent* when the hand belongs to an outgroup member. Reduced empathic resonance in response to outgroup pain is correlated with higher implicit racial bias (Avenanti, Sirigu, & Aglioti, 2010). Similarly in White and Asian participants, the shared neural circuit for pain—anterior cingulate cortex (ACC), supplementary motor area (SMA), and insula—is more active when viewing same-race as compared to other-race faces being pricked with a needle (Xu, Zuo, Wang, & Han, 2009).

Future research should extend these paradigms beyond racially defined groups to arbitrary minimal groups (e.g., Masten et al., 2010), and distinguish “extraordinary” empathy for the ingroup from failures of empathy for the outgroup (e.g., Mathur, Harada, Lipke, & Chiao, 2010). Another target variable for future research is asymmetry in power or minority status between groups. Historic differences in power and status are likely to affect the source of intergroup dampening of empathy. For example, Black and White American participants show “matching” responses to pain in White *and* Black targets (in ACC and insula), but only Black participants show additional activity in mPFC in response to ingroup suffering (Mathur et al., 2010). Black American participants’ empathy for Black individuals’ suffering is likely affected by their minority status.

Thus, outgroup members—merely by virtue of who they are and not anything they have done—reliably elicit diminished perceptions of suffering, and fail to elicit equivalent physiological and affective empathic responses. More concerning is that these dampened empathic responses are related to less helping. For example, people who attributed fewer uniquely human emotions (e.g., anguish, mourning) to opposite-race Katrina victims were also less willing to volunteer for relief efforts to help those victims (Cuddy, Rock, & Norton, 2007). In contrast, greater mPFC activity in response to ingroup suffering predicts participants’ willingness to donate time and money to help ingroup members (Mathur et al., 2010).

COMPETITION AND SCHADENFREUDE

Social identity—‘us’ and ‘them’—is most salient when groups are set in direct competition. Not surprisingly, intergroup competition strongly modulates empathic responding: distressed ingroup members typically elicit empathy (Batson & Ahmad, 2009), whereas

competitive rivals' pain may even elicit pleasure, sometimes referred to as *Schadenfreude* (Smith, Powell, Combs, & Schurtz, 2009). For male participants, brain regions associated with experiencing "reward" (i.e., left ventral striatum including nucleus accumbens) show positive activation when a competitor receives a painful electric shock (Singer et al., 2006). Both male and female participants exhibit reward-related activation (i.e., bilateral ventral striatum) when a socially competitive target experiences misfortunes (e.g., has rumors spread about them; Takahashi et al., 2009). Thus these reward-related regions respond to competitors' physical and emotional suffering.

Similar effects occur when the sufferer is not a direct competitor, but a member of a competitive group. Competitive outgroups may become targets of *Schadenfreude* following failures in intergroup competition, particularly if participants are reminded of their own group's inferiority prior to the outgroup's failure (Leach & Spears, 2009). In the context of a real-world sports rivalry, Red Sox and Yankees fans report feeling pleasure, and show activity in reward-related brain regions (i.e., right ventral striatum including nucleus accumbens) when they watch their rival fail to score against their favored baseball team, and also against a less competitive team in the same league (i.e., the Orioles). Attaching positive value to outgroup members' suffering may provide motivation for inflicting suffering: People who show more reward-related activity when watching the rival team fail also report being more likely to actively harm the rival team's fans (Cikara, Botvinick, & Fiske, in press). These findings extend to situations in which the rival fans themselves are in physical pain: Soccer fans exhibited reward-related activity (again, the right ventral striatum) when watching a rival team's fan receive a painful electric shock; the magnitude of this activity predicted participants' later unwillingness to relieve the

rival's pain by receiving half of the electric shock themselves (Hein, Silani, Preuschoff, Batson, & Singer, 2010).

Competitive groups may also become targets of Schadenfreude simply by virtue of the stereotypes associated with their group. While people self-report feeling neutral watching a high-status, competitive stranger (e.g., an investment banker) sit in gum on a park bench, they also smile (i.e., cheek muscle engagement, measured by facial electromyography), indicating the presence of positive affect (i.e., Schadenfreude), not just the absence of negative affect (i.e., feeling neutral; Cikara and Fiske, under revision). On a positive note, manipulating status and competition-relevant information can attenuate this reaction: people exhibit a more empathic response when the unfortunate target is perceived as having lower-status or as being cooperative (Cikara & Fiske, under revision).

Schadenfreude is thus a powerful and common alternative to empathy, offering positive emotions and self-affirmation in the face of a competitive threat (Leach & Spears, 2009). The lure of Schadenfreude can even overpower self-interest: people feel pleasure at rivals' misfortunes, even when the misfortunes have negative implications for themselves and society more broadly. For example, Democrats, especially those who strongly identified with their political party, reported considerable Schadenfreude after reading an article describing a mild economic downturn that occurred during a Republican administration (Combs, Powell, Schurtz, & Smith, 2009). Schadenfreude may function as a signal of ingroup cohesion, in opposition to competitors. Demonstrating pleasure instead of empathy in response to someone's misfortune is a clear sign to both ingroup and outgroup members that one's interests are not aligned with the victim (Leach & Spears, 2009).

Paradoxically, people with the most empathy for members of their ingroup may thus experience the most Schadenfreude toward a threatening outgroup. When an outgroup is perceived as antagonistic, people respond less empathically to outgroup members, but also *more* empathically to ingroup members (Dovidio et al., 2010; see, however, Xu et al., 2009 for a positive correlation between ingroup and outgroup empathic resonance). Agent-based simulations suggest that the motivation to help ingroup members, and hostility toward people from other ethnic or racial groups, may have co-evolved in humans: Group survival is more likely when many members are willing to fight in inter-group wars and even sacrifice themselves to protect others in their group (Choi & Bowles, 2007). The most dramatic incidents of intergroup violence are consistent with these suggestions: Most suicide bombers are not psychopaths, but rather may experience high empathy selectively for their own group's suffering (Ginges & Atran, 2009).

INTERVENTIONS

Social distance and group boundaries reduce people's motivation to alleviate victims' suffering. Conflict resolution and prejudice-reduction programs aim to turn this situation around using several procedures to increase empathy: perspective-taking, role playing, simulation and positive intergroup contact. The general hypothesis of these programs is that increasing empathy for specific outgroup members can increase tolerance and willingness to help (and decrease willingness to harm) other outgroup members (Batson & Ahmad, 2009). For example, in an impressive large-scale field study, a radio drama in Rwanda depicting positive intergroup interactions increased empathy of Hutus towards Tutsis (Paluck, 2009). In some cases, positive effects of intergroup contact can occur rapidly: an online video-based interaction

between Israelis and Palestinians temporarily increased positive attitudes and empathy towards the outgroup, even after only 20 minutes (Bruneau, Cohen, & Saxe, in prep). In other cases, the positive effects of interaction can be long-lasting: relative to control groups, Sri Lankan Sinhalese participants in a 4-day intergroup workshop expressed enhanced empathy towards Tamils, even one year after participating in the program (Malhotra & Liyanage, 2005). Increased empathy can in turn lead to improved attitudes towards, and willingness to help outgroups (Batson & Ahmad, 2009). For example, increasing empathy increased donations to an outgroup charity (Malhotra & Liyanage, 2005), and forgiveness for past atrocities (Cehajic, Brown, & Castano, 2008).

While success is possible, interventions are not always beneficial: empathy, positive attitudes and helpful intentions toward an outgroup can also *decrease* following perspective-taking. For example, metastereotypes—thoughts about how one (as a majority group member) may be evaluated by an outgroup member—are activated when individuals empathize with an outgroup member in the context of an intergroup interaction. These thoughts have the deleterious effect of interrupting other-focused empathic responses that are required for prejudice reduction. Moreover, among relatively high-prejudice participants, empathy-induction can elicit overtly *negative* reactions to a nearby outgroup member (Vorauer & Sasaki, 2009).

A key variable, again, is the historical asymmetries of status and power between groups. For example, intergroup interventions have asymmetric effects for majority/empowered and minority/disempowered group members when the interventions are based on intergroup contact (Pettigrew & Tropp, 2006), when they involve focused assimilation versus integration

(Dovidio et al., 2005), and when they require perspective-taking versus 'perspective-giving' (speaking and being heard by a member of the other group; Bruneau et al., 2010, in preparation).

Understanding the causes and contexts of intergroup interventions is critical. Unfortunately, well-controlled empirical studies of prejudice-reduction and conflict resolution programs remain rare, and relevant data are scarce (Paluck & Green, 2009). Since well-intended programs sometimes have no effect or even negative effects, it is particularly important that empirical evaluations of these programs match the pace of their creation.

CONCLUSION

People often empathize and feel emotional pain in response to the misfortunes of others. Empathy is, however, a highly flexible, context-dependent response. If an individual is a member of an outgroup, they are more likely to fail to initiate our empathy, and could even be targets of Schadenfreude in competitive contexts. Failures of empathy matter because they are related to diminished helping responses. While people are capable of incredible feats of cooperation and empathy, they are also capable of callousness, finding pleasure in others' pain; better understanding the social, cognitive, and neural mechanisms underlying empathy and Schadenfreude may help to alleviate humanity's deepest tragedies and facilitate its greatest triumphs.

Acknowledgments

The authors gratefully acknowledge the support of the Charlotte Elizabeth Procter Fellowship, awarded by Princeton University to MC, the UN-affiliated Alliance of Civilizations – Media Fund, and a grant from the Air Force Office of Scientific Research, managed through the Office of Naval Research (grant #N000140910845).

Notes

¹Address correspondence to Mina Cikara, Psychology Department, Princeton University, Princeton NJ 08540. Email: mcikara@princeton.edu, ebruneau@mit.edu, or saxe@mit.edu

References

- Avenanti, A., Sirigu, A., & Aglioti, S. M. (in press). Racial bias reduces empathic sensorimotor resonance with other-race pain. *Current Biology*, *20*, 1018-1020.
- Batson, C. D., & Ahmad, N. Y. (2009). Using empathy to improve intergroup attitudes and relations. *Social Issues and Policy Review*, *3*, 141.
- Batson, C. D. (2009). These things called empathy: Eight related but distinct phenomena. In J. Decety, & W. J. Ickes (Eds.), *The social neuroscience of empathy* (pp. 3-15). Cambridge, MA: MIT Press.
- Cehajic, S., Brown, R., & Castano, E. (2008). Forgive and forget? Antecedents and consequences of intergroup forgiveness in Bosnia and Herzegovina. *Political Psychology*, *29*, 351-367.
- Choi, J., & Bowles, S. (2007). The coevolution of parochial altruism and war. *Science*, *318*, 636-640.
- Cikara, M., Botvinick, M. M., & Fiske, S. T. (in press). Us versus them: Social identity shapes neural responses to intergroup competition and harm. *Psychological Science*.
- Cohen, T.R., Montoya, R.M., & Insko, C.A. (2006). Group morality and intergroup relations: Cross-cultural and experimental evidence. *Personality and Social Psychology Bulletin*, *32*, 1559-1572.
- Combs, D. J. Y., Powell, C. A. J., Schurtz, D. R., & Smith, R. H. (2009). Politics, schadenfreude, and ingroup identification: The sometimes happy thing about a poor economy and death. *Journal of Experimental Social Psychology*, *45*, 635-646.

- Cuddy, A. J. C., Rock, M. S., & Norton, M. I. (2007). Aid in the aftermath of hurricane Katrina: Inferences of secondary emotions and intergroup helping. *Group Processes & Intergroup Relations, 10*, 107-118.
- Dovidio, J. F., Gaertner, S. L., Hodson, G., Houlette, M., & Johnson, K. M. (2005). Social Inclusion and Exclusion: Recategorization and the perception of Intergroup Boundaries. In D. Abrams, J. M. Marques, & M. A. Hogg, (Eds.) *The Social Psychology of Inclusion and Exclusion* (pp. 246-264). Philadelphia: Psychology Press.
- Dovidio, J. F., Johnson, J. D., Gaertner, S. L., Pearson, A. R., Saguy, T., & Ashburn-Nardo, L. (2010). Empathy and intergroup relations. In M. Mikulincer, & Shaver, P. R. (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature*. (pp. 393-408) Washington, DC, US: American Psychological Association.
- Ginges, J., & Atran, S. (2009). What motivates participation in violent political action. *Annals of the New York Academy of Sciences, 1167*, 115-123.
- Hein, G., Silani, G., Preuschhoff, K., Batson, C. D., & Singer, T. (2010). Neural responses to ingroup and outgroup members' suffering predict individual differences in costly helping. *Neuron, 68*, 149-160.
- Leach, C. W., & Spears, R. (2009). Dejection at in-group defeat and Schadenfreude toward second- and third-party out-groups. *Emotion, 9*, 659-665.
- Malhotra, D., & Liyanage, S. (2005). Long-term effects of peace workshops in protracted conflicts. *Journal of Conflict Resolution, 49*, 908-924.
- Mathur, V. A., Harada, T., Lipke, T., & Chiao, J. (2010). Neural basis of extraordinary empathy and altruistic motivation. *NeuroImage, 51*, 1468-1475.

- Masten, C. L., Gillen-O'Neel, C., & Brown, C. S. (2010). Children's intergroup empathic processing: The roles of novel ingroup identification, situational distress, and social anxiety. *Journal of Experimental Child Psychology, 106*, 115-128.
- Meier, B. P., & Hinsz, V. B. (2004). A comparison of human aggression committed by groups and individuals: An interindividual-intergroup discontinuity. *Journal of Experimental Social Psychology, 40*, 551-559.
- Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: A field experiment in rwanda. *Journal of Personality and Social Psychology, 96*, 574-587.
- Paluck, E. L., & Green, D. P. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual Review of Psychology, 60*, 339-367.
- Pettigrew, T. F., & Tropp, L. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751-783.
- Preston, S.D., de Waal, F. B. M. (2002). Empathy: its ultimate and proximate bases. *Behavioral and Brain Sciences, 25*, 1-72.
- Singer, T., Seymour, B., O'Doherty, J. P., Stephan, K. E., Dolan, R. J., & Frith, C.D. (2006). Empathic neural responses are modulated by the perceived fairness of others. *Nature, 26*, 466-469.
- Smith, R. H., Powell, C. A. J., Combs, D. J. Y., & Schurtz, D. R. (2009). Exploring the when and why of Schadenfreude. *Social and Personality Psychology Compass, 3*, 530-546.
- Takahashi, H., Kato, M., Matsuura, M., Mobbs, D., Suhara, T., & Okubo, Y. (2009). When your gain is my pain and your pain is my gain: Neural correlates of envy and Schadenfreude. *Science, 323*, 937-939.

Vorauer, J. D., & Sasaki, S. J. (2009). Helpful only in the abstract? ironic effects of empathy in intergroup interaction. *Psychological Science, 20*, 191-197.

Xu, X., Zuo, X., Wang, X., & Han, S. (2009). Do you feel my pain? racial group membership modulates empathic neural responses. *The Journal of Neuroscience, 29*, 8525-8529.

RECOMMENDED READINGS

Batson, C. D. (2009). (See references). A clearly written, user-friendly, and brief review for readers who wish to expand their knowledge of empathy research.

Chiao, J. Y., & Mathur, V. A. (2010). Intergroup empathy: How does race affect empathic neural responses? *Current Biology*, 20, R478-R480. A brief and accessible review of neurophysiological explanations of group-based modulation of empathic responses.

Paluck & Green (2009). (See references). A comprehensive, highly accessible overview of what is known about prejudice reduction interventions.