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On Disgust and Moral Judgment

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Abstract

Despite the wealth of recent work implicating disgust as an emotion central to human morality, the nature of the causal relationship between disgust and moral judgment remains unclear. We distinguish between three related claims regarding this relationship, and argue that the most interesting claim (that disgust is a *moralizing* emotion) is the one with the least empirical support.

Keywords

disgust, emotion, moral judgment

Disgust, an emotion that most likely evolved to keep us away from noxious substances and disease, seems especially active in our moral lives. People report feeling disgust in response to many immoral acts (e.g., Rozin, Lowery, Imada, & Haidt, 1999), make more severe moral judgments when feeling disgust (e.g., Wheatley & Haidt, 2005), and are more likely to view certain acts as immoral if they have a tendency to be easily disgusted (Horberg, Oveis, Keltner, & Cohen, 2009; Inbar, Pizarro, Knobe, & Bloom, 2009). Yet despite this work implicating disgust as important to moral judgment, the nature of the causal relationship between the two remains unclear. Although the bulk of empirical work on the topic may lend support to the general claim that disgust and moral judgment are causally connected, little attempt has been made to distinguish between more specific claims about how they are connected. In what follows, we distinguish between three versions of this general claim, review evidence for each, and argue that the most interesting of the three is the one with the least empirical support.

Disgust as a Consequence of Moral Violations

The first version of the claim that disgust bears a special causal relationship to moral judgment is that disgust is experienced as a

result of an appraisal that a moral violation has occurred. For instance, some have argued that disgust is uniquely experienced in response to moral "purity" violations (e.g., Rozin et al., 1999), or other "taboo" moral violations (Gutierrez & Giner-Sorolla, 2007). In support of this view, researchers have shown that participants report disgust at certain "harmless" moral violations (e.g., eating one's pet dog). However, because the moral violations described in these experiments often contain references to nonmoral "core" disgust elicitors (e.g., Moll et al., 2005), it is unclear that the disgust felt by participants actually results from the moral appraisal. One notable exception comes from recent evidence demonstrating that participants who receive unfair offers in an ultimatum game demonstrate facial muscle activation (as measured by electromyography [EMG]) consistent with the expression of disgust even in the absence of a core disgust elicitor (Chapman, Kim, Susskind, & Anderson, 2009).

Disgust as an Amplifier of Moral Judgment

A second claim regarding the relationship between disgust and morality is that disgust amplifies moral evaluations—it makes wrong things seem *even more* wrong. This has been demonstrated in experiments in which disgust is manipulated in a

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manner that is extrinsic to the moral act being evaluated (e.g., through the use of film clips). Note, however, that these studies typically do not show that disgust exerts a *domain-specific* causal influence on moral judgment, rather than simply shifting all judgments toward the negative. For instance, while it has been demonstrated that inducing disgust can make individuals harsher judges of moral violations (Wheatley & Haidt, 2005), it may be that individuals induced to feel disgust would also judge individuals more harshly for other actions (e.g., job performance or a social interaction) or in other domains (e.g., attractiveness, intelligence). Experimental designs that include only judgments of moral violations (or that limit their dependent variables to moral evaluations) cannot distinguish between the claim that disgust *can* influence moral judgment.

Disgust as a Moralizing Emotion

The strongest claim regarding the relationship between disgust and moral judgment is that morally neutral acts can enter the moral sphere by dint of their being perceived as disgusting. This claim is consistent with the finding that "morally dumbfounded" participants defend their (admittedly) irrational moral judgments with an appeal to the disgusting nature of an act. In these cases the presence of disgust appears to be neither a consequence of the moral appraisal (Claim 1), nor does it appear that disgust is simply amplifying a moral judgment that would have been made in its absence (Claim 2). Rather, the feeling of disgust seems to be taken as evidence by the participant that the act is wrong (an interpretation that would be consistent with the "feeling-asinformation" approach: Schwarz & Clore, 1988). Researchers (including us) often appear to endorse this claim despite the correlational nature of their findings. For instance, we have argued that disgust toward homosexual behavior may be the causal force underlying antigay moral attitudes (e.g., Inbar et al., 2009; researchers investigating moral vegetarianism and incest avoidance have argued similarly; Borg, Lieberman, & Kiehl, 2008; Rozin, Markwith, & Stoess, 1997). Yet despite its intuitive appeal, the evidence for this claim is the weakest of the three.

For one, looking beyond correlational evidence to the experimental work (in which disgust is manipulated) yields little in the way of support for this claim. Most of the experimental evidence suggests only amplification—that disgust causes immoral behaviors to seem more immoral. We are aware of two notable exceptions. The first is from Wheatley and Haidt's (2005) work, in which individuals who were hypnotized to feel disgust while evaluating a set of scenarios judged a neutral act (as judged by participants in the nondisgust control condition) to be immoral. The second is reported by Horberg et al. (2009), who found that participants who watched a disgusting film clip subsequently rated morally neutral but "purity-violating" behaviors (such as wearing mismatched clothes) as morally worse than did control subjects (who watched a sad film clip). Although these two pieces of evidence are promising indicators of disgust as exerting a moralizing effect, more experimental support is needed.

Yet even with greater experimental support, a more obvious objection to the moralization hypothesis remains-disgust cannot be sufficient for moralization to occur because there is a plethora of behaviors that are judged by most people as disgusting but not immoral, such as eating pig brains or picking one's nose in private (e.g., Royzman, Leeman, & Baron, 2009). A credible defense of the claim that disgust exerts a moralizing influence would seem to require a plausible account of why it does not seem to moralize behaviors in most cases. One possibility is that disgust exerts a moralizing influence only on behaviors for which there already exist nonmoral proscriptive norms (e.g., smoking; Nichols, 2004). In these cases, the pairing of disgust with (or the tendency to be disgusted by) the behavior might cause it to be "pushed" into the moral domain. Evidence for this view could be defended with longitudinal data comparing moral attitudes toward disgusting and nondisgusting behaviors that either have an existing (but nonmoral) proscriptive norm or not. If this view is correct, one would expect moralization over time to occur only in the disgusting behaviors for which there are already conventional norms in place.

References

- Borg, J. S., Lieberman, D., & Kiehl, K. A. (2008). Infection, incest, & iniquity: Investigating the neural correlates of disgust and morality. *Journal of Cognitive Neuroscience*, 20, 1529–1546.
- Chapman, H., Kim, D., Susskind, J., & Anderson, A. (2009). In bad taste: Evidence for the oral origins of moral disgust. *Science*, 323, 1222.
- Gutierrez, R., & Giner-Sorolla, R. (2007). Anger, disgust, and presumption of harm as reactions to taboo-breaking behaviors. *Emotion*, 7, 853–868.
- Horberg, E. J., Oveis, C., Keltner, D., & Cohen, A. B. (2009). Disgust and the moralization of purity. *Journal of Personality and Social Psychology*, 97, 963–976.
- Inbar, Y., Pizarro, D. A., Knobe, J., & Bloom, P. (2009). Disgust sensitivity predicts intuitive disapproval of gays. *Emotion*, 9, 435–439.
- Moll, J., de Oliveira-Souza, R., Moll, F. T., Ignacio, F. A., Bramati, I. E., Caparelli-Daquer, E. M., & Eslinger, P. J. (2005). The moral affiliations of disgust: A functional MRI study. *Cognitive and Behavioral Neurology*, 18, 68–78.
- Nichols, S. (2004). Sentimental rules: On the natural foundations of moral judgment. New York, NY: Oxford University Press.
- Royzman, E. B., Leeman, R. F., & Baron, J. (2009). Unsentimental ethics: Toward a content-specific account of the moral-conventional distinction. *Cognition*, 112, 159–274.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal* of Personality and Social Psychology, 76, 574–586.
- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and becoming a vegetarian, *Psychological Science*, 8, 67–73.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of affective states. In K. Fiedler & J. Forgas (Eds.), *Affect, cognition and social behavior* (pp. 44–62). Toronto, Canada: Hogrefe.
- Wheatley, T., & Haidt, J. (2005). Hypnotic disgust makes moral judgments more severe. *Psychological Science*, 16, 780–784.