

## 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.

## On disgust and 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, Haidt, & Inada, 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. This may be because, 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, Lowery, Imada, & Haidt, 1999), or other “taboo” moral violations (Gutierrez & Ginner-Sorolla, 2007). In support of this view, researchers have

shown that participants report disgust at moral violations that cannot be justified by appeals to harm (e.g., zoophilic acts). However, because the moral violations described in these experiments often contain references to non-moral “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 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 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 and the claim that they exert a *special* influence on 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 (consistent with the “feeling-as-information” 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 anti-gay 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, moving 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 & Haidt (2005), 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 non-disgust control condition) to be immoral. The second is reported by Horberg et al. (2009) in which participants made to feel disgust by watching a film clip 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 are a plethora of behaviors that are judged by most 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 non-moral 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 non-disgusting behaviors that either have an existing (but non-moral) proscriptive norm and those which do 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.

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