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Reports

Morality in high definition: Emotion differentiation calibrates the influence of incidental disgust on moral judgments

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HIGHLIGHTS

- Incidental emotions influence moral judgments despite being logically irrelevant.
- Trait emotion differentiation predicts reduced incidental disgust priming of moral judgment.
- State emotion differentiation reduces incidental disgust priming of moral judgment.

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ABSTRACT

Changing people's emotions can change their moral judgments, even when the emotions are incidental to the judgment and hence morally irrelevant. It has commonly been assumed that people lack the motivation or ability to correct against such incidental emotional influences. We provide evidence that the ability to make fine-grained distinctions between emotions is an important moderator of these effects. In two experiments, we found that measured (Experiment 1) and manipulated (Experiment 2) emotion differentiation calibrated the relationship between incidental disgust and moral judgments. Whereas unskilled emotion differentiators made stronger moral judgments after incidental disgust priming, skilled emotion differentiators did not. Emotion differentiation may sharpen moral perception, by enabling people to discount incidental emotions while making moral judgments.

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Introduction

It has traditionally been assumed that when people engage in moral judgment, they reason deliberatively using general principles (Kennett & Fine, 2009; Kohlberg, 1971). Yet an increasing consensus suggests that emotions are critically involved in moral judgments (Greene, 2008; Haidt, 2001; Horberg, Oveis, & Keltner, 2011; Moll, Zahn, de Oliveira-Souza, Krueger, & Grafman, 2005; Nichols, 2004a; Prinz, 2007). Some of the strongest evidence for this consensus comes from studies showing that manipulating emotions can influence moral judgments. For example, hypnotically inducing disgust toward specific words increases moral condemnation of actions in scenarios containing those words (Wheatley & Haidt, 2005), priming disgust through noxious odors increases the severity of moral condemnation (Schnall, Clore, Haidt, & Jordan, 2008), disgusting film clips increase condemnation of purity violations (Horberg, Oveis, Keltner, & Cohen, 2009), and ingesting a disgusting drink causes people to be harsher moral judges (Eskine, Kacinik, & Prinz, 2011).

While many scholars have argued that emotions interfere with moral judgment, leading to biased reasoning and erroneous conclusions (Kant, 1785/1959; for discussion, see Kahan & Nussbaum, 1996), others contend that emotions contain vital information that should factor into moral judgments (Damasio, 1994; Frank, 1988; Hume, 1777/1960). Such disagreements may be resolved by distinguishing between emotions that are *incidental* to the actions being judged versus emotions that are *integral* to them. Integral emotions may contain information that should appropriately influence moral judgments: guilt may signal that you have behaved badly towards others, and anger may signal that others have behaved badly towards you (Frank, 1988). In contrast, incidental emotions are conceptually unrelated to subsequent judgments, and so are ethically irrelevant (Doris & Stich, 2005). Whereas incidental emotions may *influence* moral judgments, they are not appropriately cited as evidence in the *justification* of these judgments. For example, disgust engendered by a filthy desk is not a plausible justification for condemning an unrelated act. Yet much research suggests that the influence of incidental emotions on moral judgments is widespread, implying that moral judgments vary arbitrarily across

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emotional contexts (Sauer, 2012; Sinnott-Armstrong, 2011). Practically speaking, the influence of irrelevant emotions is problematic because it suggests that moral judgment may be capricious and unreliable.

In this paper we explore an important implication of the idea that emotions shape moral judgment. We hypothesize that individuals who are more skilled in making fine distinctions among emotional experiences will make moral judgments that are less influenced by incidental emotions, because they have better awareness of the sources of their emotional experiences. If dispositional and situational differences in emotional processing affect moral judgment, factors that shape the experience of emotions are important variables to include in theories of moral psychology. Our studies identify boundary conditions for when incidental emotions may render moral judgment less reliable.

Intuitionism and expertise

The social intuitionist model (Haidt, 2001) was developed in response to rationalist theories of moral judgment in developmental psychology (e.g., Kohlberg, 1971). Drawing on research in automaticity and dual-process theories of social cognition (Gawronski & Payne, 2010), the social intuitionist model posits that in most cases, automatic affective intuitions—and not deliberative reasoning—drive moral judgments. Although private deliberative reasoning might occasionally change moral judgments, social intuitionists assert that this is rare (Haidt, 2001). Rather than acting as an independent check on the validity of emotional responses, deliberative reasoning is generally used to confirm desired conclusions (Baumeister & Newman, 1994; Nickerson, 1998) and persuade others under the illusion of objectivity (Mercier & Sperber, 2011; Pyszczynski & Greenberg, 1987). In sum, social intuitionists assert that emotions dominate moral judgment, with deliberative reasoning rarely having efficacy to intervene.

Many researchers have suggested that the social intuitionist claim for the hegemony of emotion in moral judgment is overstated (Kennett & Fine, 2009; Mallon & Nichols, 2011; Narvaez, 2010; Paxton & Greene, 2010; Pizarro & Bloom, 2003). One important challenge emphasizes differences between "naïve" and "educated" emotional reactions, and suggests that people can develop expertise with regards to their emotions (Brackett, Rivers, Reyes, & Salovey, 2012; Narvaez, 2010). Experts have well-organized schemas and conceptual knowledge about the domain of expertise, and notice critical details and fine-grained distinctions that novices miss (Hogarth, 2010; Kahneman & Klein, 2009). People with more educated emotional reactions might be able to discern the morally relevant factors of a situation—and discard the irrelevant factors—with greater clarity and efficiency (Gibbs, 2009; Ottati & Isbell, 1996).

These considerations support an account of moral expertise in which emotional reactions do not always dominate moral judgments. Feelings-as-information theory suggests that when people are clear about their emotions, they can use these emotions to guide judgments more effectively (Lambie, 2009; Lane, 2008; Schwarz & Clore, 2007). Introspective awareness of emotional experience might influence how emotions inform moral judgments (Horberg et al., 2011). We suggest that people can develop moral expertise by developing the ability to differentiate the precise features of their emotional experiences.

Emotion differentiation

Although affective experience is a universal feature of human development, there is notable variability in what people understand about this experience (Barrett, Mesquita, Ochsner, & Gross, 2007; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Emotion differentiation, also known as emotional granularity, is the ability to represent emotional experiences with precision and specificity (Lindquist & Barrett, 2008, p. 516). As a form of emotional awareness, it can be seen as part of the "Perceiving emotions" and "Understanding emotions" facets of emotional intelligence (Mayer, Salovey, & Caruso, 2004). Skilled emotion differentiators use more precise emotion terms—such as "disgust" and "anger"—to represent what they are feeling as qualitatively distinct emotional experiences (Lindquist & Barrett, 2008, p. 516). In response to a moral transgression, skilled emotion differentiators represent what they are feeling as distinct emotions such as disgust or anger, and may report different levels of these two emotions. Emotion differentiation skill is theorized to result from having refined conceptual knowledge about emotions and the cognitive resources to apply this knowledge to categorize core affect (Lindquist & Barrett, 2008). By contrast, unskilled emotion differentiators represent how they are feeling in terms of more global, diffuse affective states such as valence and arousal, rather than in terms of distinct emotions (Lindquist & Barrett, 2008, p. 516). In response to a transgression, unskilled emotion differentiators may simply report that they "feel bad" (focusing on unspecified negative valence), without distinguishing between negative emotions such as disgust and anger (they would report equivalent levels of disgust and anger because they are not conceptually differentiating between the two). Unskilled emotion differentiators do not use specific emotion concepts to categorize affect into distinct emotional states, leading their affective experiences to be broad, undifferentiated, and diffuse (Lindquist & Barrett, 2008).[1]

Because diffuse and undifferentiated affective states are not tied to a specific cause or source, they are especially likely to be misattributed onto subsequent judgments (Clore & Huntsinger, 2009; Keltner, Locke, & Audrain, 1993; Lambie & Marcel, 2002; Russell & Barrett, 1999). An important correlate of emotion differentiation is source awareness (Johnson, Hashtroudi, & Lindsay, 1993): emotion differentiation can reduce affect misattribution by reducing ambiguity about the causes of emotional experience (Ruys, Aarts, Papies, Oikawa, & Oikawa, 2012). After identifying affect as a specific emotion, people access knowledge about that emotion's typical causes, appraisal structures, and consequences (Wranik, Barrett, & Salovey, 2007), which can clarify what is causing the emotion in the current situation. Emotion differentiation allows people to better understand the emotional components of their moral judgment and see which are relevant for the decision and which are not. Thus, emotion differentiation may enable moral expertise by decreasing affect misattributions during moral judgments.

In the current studies, we used an affective priming task in which people have difficulty differentiating between their incidental and integral emotions while making moral judgments. According to the process model of affect misattribution (Payne, Hall, Cameron, & Bishara, 2010), performance on such a task will depend on whether people make an affect misattribution (i.e., mistaking affect caused by the prime for feelings toward the focal judgment). If people make a misattribution, they will rely upon incidental (primed) emotions. If they do not make a misattribution, they will rely upon integral emotions. To the degree that emotion differentiation improves source awareness, it should diminish the likelihood of misattributions, leading to decreased reliance on incidental emotions and increased reliance on integral emotions. Given the emotional basis of many moral judgments, emotion differentiation might thus be seen as a way of sharpening moral perception, by helping to reduce variation in moral judgments due to incidental emotional "noise" and increase variation due to integral emotional "signal."

In Experiment 1, we examined how individual differences in emotion differentiation moderated the influence of incidental disgust on moral judgment. We predicted that incidental disgust priming would only emerge for people who could not effectively differentiate their emotions. In Experiment 2, we used an instructional set to increase state levels of emotion differentiation. We predicted that

[1] Lindquist and Barrett (2008) do not posit the existence of discrete emotions as natural kinds, given their work on the psychological construction of emotion. Emotion differentiation captures the nuance with which people conceptualize affective experience into qualitatively distinct emotional states.

incidental disgust priming would emerge for people who were not instructed to differentiate their emotions, but that the instructional set would reduce this priming effect.

Experiment 1

In Experiment 1, we utilized an affective priming task to examine whether incidental disgust would influence moral judgments and whether emotion differentiation would moderate this effect. This paradigm presented disgusting or neutral images in conjunction with behaviors that were the targets of moral judgment. We designed the task to be similar to the affect misattribution procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005), a sequential priming measure based upon principles of affect misattribution. The present task contains two sources of emotion: incidental disgust toward the prime stimuli and integral disgust toward the target behaviors. To the degree that people make a misattribution about the source of their emotions, they should be more likely to rely upon incidental disgust when making their moral judgments (Payne et al., 2010).

Much like in the typical AMP, subjects in the present experiment were instructed that the prime images could change their judgments and to avoid such influence. In typical between-subject misattribution paradigms, making people aware of incidental emotional influence leads them to correct against it (Schwarz & Clore, 2007). In the AMP, primes and targets appear in the same location and in quick succession, making it difficult to distinguish affect from the primes versus the target even when a warning about prime influence has been provided (Payne et al., 2005).

Finding incidental disgust priming despite participants' intentions to the contrary would be consistent with the social intuitionist claim that private deliberative reasoning is typically unable to fully counteract emotional reactions (Haidt, 2001). Conversely, a moral expertise perspective would suggest that emotion-related skills might afford people greater control over their moral judgments. Both skilled and unskilled emotion differentiators were told about the potential for prime influence, but we predicted that only skilled emotion differentiators would have the ability to fully counteract incidental disgust priming.

Method

Participants

We recruited 136 participants (91 females, 45 males) from the University of North Carolina at Chapel Hill for course credit. Data were excluded for 1 participant who pressed the same key on all priming task trials, 2 participants who arrived late and did not receive full instructions, 2 participants who acted inappropriately during the experiment, and 1 participant who indicated being unable to read the target behaviors.

Materials and procedures

After being seated at individual workstations, participants completed an affective priming task. Prime stimuli were disgusting or neutral images drawn from the International Affect Picture System (Lang, Bradley, & Cuthbert, 2005) based upon emotional category norming data (Mikels et al., 2005). The pictures occupied approximately two-thirds of the computer screen, so that they would be visible for the duration of each trial.

Target stimuli were solid rectangles containing short text descriptions of actual cultural practices developed from the Human Relations Area File (HRAF, 2011). Each description was of a practice generally considered wrong in American society, although some items are less counter-normative (e.g., "In Palestinian culture marriages are arranged by the children's parents") than others (e.g., "In Tupinamba culture a person may be pronounced dead and buried alive when they are too ill to speak"). To adapt these descriptions to the priming task, they were shortened to brief phrases (e.g., "Marriages are arranged by the children's parents," "People are buried alive when they are too ill to speak"). Participants were instructed that each statement referred to a real practice that is considered acceptable in some culture, based on research by anthropologists, but references to specific cultures were omitted. Because many of the behaviors are counter-normative in American culture, participants may not vary much in their condemnation of these behaviors. However, if these participants are instructed to consider the moral status of these behaviors relative to the culture in which they occurred, greater variation among subjects might be observed, reducing the potential for ceiling effects. We thus asked participants whether the behaviors were wrong absolutely (as opposed to relative to one's culture; Doris & Plakias, 2008; Mackie, 1977; Nichols, 2004b).

On a given trial, the prime stimulus remained on screen for the entire trial. After 100 ms, the target stimulus appeared overlaid on top of the prime for 2500 ms before disappearing. At this point, a moral judgment prompt appeared at the bottom of the screen: "To what degree is the behavior morally wrong regardless of the culture in which it is practiced?" (from 1 = Not at all to 5 = Extremely). The prime and prompt remained on screen until participants entered their responses. Participants were told to avoid the influence of the primes and respond as quickly as possible. The priming task contained 30 trials.[2] Primes and targets were paired randomly, and each prime image was only presented once during the task. In a pilot sample of 40 undergraduates, disgust primes increased the strength of moral judgments despite warnings about prime influence, $F(1, 39) = 5.63$, $p = .02$, $\eta_p^2 = .12$.

After the priming task, participants completed the emotion differentiation measure. We included this measure after the priming task to avoid activating emotion conceptual knowledge. Participants responded to 10 scenarios from the Levels of Emotional Awareness Scale (LEAS; Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990), which describes emotional situations in everyday life, such as a friend winning a prize that you were competing for. For each scenario, participants rated how much they felt each of four emotions (1 = Not at all to 5 = Extremely): anger, guilt, sadness, and shame.

We computed emotion differentiation as the intra-class correlation coefficient between the emotion responses across all scenarios. The intra-class correlation coefficient of emotion reports is one of the most widely used measures of emotion differentiation (Barrett, Gross, Conner, & Benvenuto, 2001; Barrett, 2004; Hill & Updegraff, 2012; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Pond et al., 2012; Suvak et al., 2011; Tugade, Fredrickson, & Barrett, 2004). Unlike self-report measures, the intra-class correlation coefficient approach is less susceptible to social desirability biases and lack of self-insight about emotional intelligence (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). Higher intra-class correlations represent lower levels of emotion differentiation, as participants are using distinct emotion terms in the same way to represent how they feel. For an unskilled emotion differentiator, the terms "anger," "guilt," "sadness," and "shame" will be represented in similar ways: negative valence, or "feels bad." By contrast, lower correlations suggest greater discrimination in using emotion terms to represent affective experiences.

In addition to emotion differentiation, we also measured mood intensity as the average of all the emotion items in response to the LEAS scenarios. Whereas emotion differentiation captures differences between discrete emotion responses, the mood intensity measure captures general affective intensity. A potential alternative explanation for our hypothesized effects is that skilled emotion differentiators

[2] We used repeated measures ANOVA to investigate disgust priming and moderation by emotion differentiation. As would be expected for within-subjects measures, moral judgments on disgust-prime and neutral-prime trials correlated positively in Experiment 1 ($r = .76$, $p < .001$) and Experiment 2 ($r = .74$, $p < .001$). When using a linear mixed model with an autoregressive covariance structure, the interactions between prime and emotion differentiation remained significant in Experiment 1 ($p = .05$) and Experiment 2 ($p = .04$).

would show reduced incidental disgust priming because they have less intense affective experience (Lieberman et al., 2007) and not because of being more emotionally discerning. We included mood intensity as an additional moderator to account for this possibility.

Results

We predicted that incidental disgust would increase the strength of moral judgments, but only for unskilled emotion differentiators. Results were analyzed with a 2-level (Prime: disgust, neutral) repeated-measures general linear model.[3] We included emotion differentiation and mood intensity as moderators. Because moral judgments and emotion differentiation were negatively skewed, we log-transformed both variables. Emotion differentiation was associated with more lenient moral judgments overall, $F(1, 127) = 4.67$, $p = .03$, $\eta_p^2 = .04$. Mood intensity was not associated with moral judgments, $F(1, 127) = .52$, $p = .47$, $\eta_p^2 = .00$, and did not moderate the priming effect, $F(1, 127) = 2.29$, $p = .13$, $\eta_p^2 = .02$. Disgust primes did not influence moral judgments overall, $F(1, 127) = 1.65$, $p = .20$, $\eta_p^2 = .01$; but critically, there was a significant interaction between emotion differentiation and the priming manipulation, $F(1, 127) = 4.08$, $p = .045$, $\eta_p^2 = .03$. As predicted, individual differences in emotion differentiation moderated how incidental disgust influenced moral judgments. To further understand this interaction, we compared estimated marginal means of disgust- and neutral-prime trials at 1 standard deviation above and below the mean of emotion differentiation. For participants low on emotion differentiation, incidental disgust increased the strength of moral judgments, $F(1, 127) = 5.57$, $p = .02$. For participants high on emotion differentiation, this influence disappeared, $F(1, 127) = .41$, $p = .52$. Table 1 presents the raw estimated marginal means and standard errors of moral judgments for disgust-prime and neutral-prime trials at high and low levels of emotion differentiation. Skilled emotion differentiators were able to prevent incidental disgust from influencing moral judgments.

Table 1
Estimated marginal means and standard errors of moral judgment by prime type and emotion differentiation, Experiment 1.

	Disgust prime *M*	*SE*	Neutral prime *M*	*SE*
Low emotion differentiation	4.34	.069	4.24	.068
High emotion differentiation	4.07	.069	4.11	.068

Discussion

Experiment 1 showed that individual differences in emotion differentiation moderated the relationship between incidental disgust and moral judgments. For unskilled emotion differentiators, disgust primes increased the strength of moral judgments despite a warning about this influence. By contrast, skilled emotion differentiators were able to counteract the influence of incidental disgust. Importantly, this effect was independent of general mood intensity, suggesting that the ability to differentiate emotions was responsible for the effect.

Experiment 2

Whereas Experiment 1 revealed correlational evidence for the role of emotion differentiation in moral judgment, manipulating emotion differentiation would provide stronger evidence that emotion differentiation causally reduces the effects of incidental emotions on moral judgments. To manipulate emotion differentiation, we randomly assigned half of participants to receive emotion differentiation training. First, participants in the training group received instructions to introspect on their emotions in a complex and differentiated manner. Aspects of these instructions were adapted from self-report measures of emotion differentiation (e.g., Kang & Shaver, 2004; see also Albarracin & Kumkale, 2003, Experiment 3). Second, participants in the training group rated discrete emotions toward each of a series of affective images. We predicted that participants who were instructed to differentiate their emotions would show reduced influence of incidental disgust on their moral judgments.

Method

Participants

We recruited 124 participants (78 females, 46 males) from the University of North Carolina at Chapel Hill for course credit. Participants were randomly assigned to either the training condition or the control condition. Data were excluded for 2 participants who failed to follow task instructions, and 3 participants whose computers malfunctioned during the training exercise.

Materials and procedures

Participants in both groups began the experiment by completing an emotion introspection exercise. Participants in the training condition were told:

> "As the first part of today's experiment, we are going to show you a series of emotional images. While you are viewing the images, we would like you to focus on the nuances and subtleties of what you are feeling. Just as there are many nuances and shades of colors, there are many variations and shades of emotions. For instance, seeing a picture of a suffering child might make you feel some sadness for the child, some pity for the child, and some anger at the child's situation. While you are viewing the images, pay attention to the subtle differences between the feelings you are having toward the images. After seeing each image, you will be asked to report the extent to which it makes you feel a variety of different emotions."

These instructions were designed to encourage differentiated emotional introspection by focusing people on subtle differences between their emotions. Participants in the control condition were told to introspect in a less nuanced way:

> "While you are viewing the images, we would like you to focus on how good or bad you are feeling toward the images. While you are viewing the images, pay attention to whether the images are making you feel good or bad. After seeing each image, you will be asked to report the extent to which it makes you feel good or bad."

Both groups then practiced the instructions while viewing six emotional pictures. These images were normed as undifferentiated, so that they did not elicit a specific emotion but rather diffuse negative affect (Mikels et al., 2005). The images depicted an electric chair, cocaine, a factory, a gun, a police raid, and a crashing airplane. After each image was displayed for 10 s, subjects in both groups made judgments about the image. Participants in the training condition judged the degree to which each image made them feel anger, disgust, fear, guilt, and sadness (from 1 = Not at all to 5 = Extremely). By contrast, participants in the control condition judged how good or bad each image made them feel (from 1 = Bad to 5 = Good).

[3] We also included 15 fear-prime trials to explore whether priming would emerge for another negative emotion. For this exploratory analysis, we utilized a 2-level (Prime: Fear, neutral) repeated measures-GLM with emotion differentiation and mood intensity as moderators. There were not main effects of fear primes, $F(1, 127) = .15$, $p = .70$, $\eta_p^2 = .00$, emotion differentiation, $F(1, 127) = 2.43$, $p = .12$, $\eta_p^2 = .02$, or mood intensity, $F(1, 127) = .26$, $p = .61$, $\eta_p^2 = .00$. Fear priming was not moderated by emotion differentiation, $F(1, 127) = .22$, $p = .64$, $\eta_p^2 = .00$, or mood intensity, $F(1, 127) = 1.04$, $p = .31$, $\eta_p^2 = .01$. Fear primes in the current study, which included sharks and snarling dogs, may not have been sufficiently realistic or aversive to trigger a strong emotional response.

Participants then completed the affective priming task, which contained 50 trials (25 disgust trials, 25 neutral trials). Because primes were drawn from a set of 15 disgust images and 15 neutral images, some images were selected multiple times. Before the task, participants in the training condition were reminded to differentiate their emotions while completing the task.

Results

We predicted that incidental disgust would lead to stronger moral judgments in the control condition, but that this effect would disappear in the training condition. Because moral judgments were negatively skewed, we log-transformed them for analysis. Results were analyzed using a 2 (Prime: Disgust, neutral) × 2 (Training condition) repeated-measures general linear model. Participants in the training condition made stronger moral judgments overall, $F(1, 117) = 6.92$, $p = .01$, $\eta_p^2 = .06$. It is possible that participants in the training condition made stronger moral judgments because they had to make more emotion judgments during the training exercise than the control group did, leading to increased negative mood. However, if the training exercise only increased negative mood and did not also increase emotion differentiation, then we would still expect a selective priming effect of incidental disgust in the training condition. There was not a main effect of prime, $F(1, 117) = .68$, $p = .41$, $\eta_p^2 = .01$, but critically, the main effect was qualified by the interaction between prime and training condition, $F(1, 117) = 4.13$, $p = .04$, $\eta_p^2 = .03$. In the control condition, incidental disgust led to marginally stronger moral judgments, $F(1, 57) = 3.36$, $p = .07$, $\eta_p^2 = .06$. But in the training condition, incidental disgust priming vanished, $F(1, 60) = .91$, $p = .35$, $\eta_p^2 = .02$. Table 2 presents the raw estimated marginal means and within-cell standard deviations of moral judgments for disgust-prime and neutral-prime trials for the training and control conditions. As predicted, participants who were trained to differentiate their emotions showed no influence of incidental disgust on their moral judgments.

Discussion

Experiment 2 showed that manipulating emotion differentiation changed how incidental disgust influenced moral judgments. By encouraging people to introspect more precisely on their emotions and by having them differentiate affective experience into discrete emotions, we helped them to identify and discount incidental disgust. Building on the correlational findings from Experiment 1, the causal findings in Experiment 2 provide more conclusive evidence that emotion differentiation can make moral judgments less susceptible to arbitrary incidental emotional influences.

General discussion

When making moral judgments, people are often influenced by how they are feeling. In many cases, these feelings are due to events that bear no evidential relation to the judgment. A person might feel happy because it is sunny outside, disgusted because of a bad smell, or sad because she watched a tragic film, and these emotions may impact moral judgments even if they would not be appropriately be cited in the justification of these judgments. In so far as appropriate moral judgments should be informed only by relevant considerations, such influence presents a problem for moral judgments.

On the social intuitionist model, this problem is expected to be intractable: people are typically unaware of how incidental emotions influence their moral judgments, and even when they are aware, they typically lack the motivation and capacity to correct such influences (Haidt, 2001). Our studies replicated the emotion priming effects predicted by the social intuitionist model, and extended this research by demonstrating that these effects persisted even when participants overtly attempted to avoid such influence. Yet our studies also show that contrary to what the social intuitionist model predicts, the influence of incidental emotions on moral judgment can be prevented if certain emotional skills are in place. Our findings suggest that people can develop "moral expertise" and make more informed moral judgments by becoming aware of their emotions. When people can clearly differentiate their emotions, they can recognize and discount irrelevant emotions while making moral judgments. Emotion priming of moral judgment may be contingent upon people being unclear about their affective experience.

In Experiment 1, we found that individual differences in emotion differentiation moderated incidental disgust priming of moral judgment. Incidental disgust only increased the strength of moral judgments for people who could not clearly differentiate their emotions, suggesting that skilled emotion differentiators had the expertise to discount disgust that was logically irrelevant for moral judgments. In Experiment 2, we replicated this effect using an experimental manipulation of emotion differentiation. Whereas people who had been encouraged to focus on their emotions in a crude and undifferentiated way showed disgust priming, people who had been trained to introspect precisely on their emotions and actively differentiate affect into discrete emotions were not influenced by incidental disgust.

Incidental emotions are a clearly irrelevant source of influence on moral judgments. By contrast, integral emotions often contain morally relevant information (Damasio, 1994; Frank, 1988). Skilled emotion differentiators may be better at identifying integral emotions, amplifying associated moral judgments (Horberg et al., 2011). On the other hand, this enhanced awareness may lead to skepticism (Greifeneder, Bless, & Pham, 2011): skilled differentiators might recognize feelings of disgust toward homeless individuals (Harris & Fiske, 2006), but then deem them irrelevant for moral judgments (Plakias, 2012).

The findings presented here suggest new ways to think about the relationship between emotions and morality. Often, emotion-based models of morality assume that everybody experiences emotions in the same way. We have shown that people who have a more differentiated, "high-definition" emotional experience make—and can be trained to make—more contextually appropriate moral judgments. Examining varieties of emotional experience can also help answer unresolved questions in moral psychology. Whereas some studies show correspondence between specific emotions and judgments about theoretically related moral violations (e.g., disgust and purity violations; Horberg et al., 2009), other studies have only found generalized effects of negative affect (Schnall et al., 2008). Emotion differentiation could explain such conflicting findings. For unskilled emotion differentiators, any negative emotion—such as disgust or sadness—might influence moral judgments in the same way, even for very different kinds of moral violations. Skilled emotion differentiators could distinguish disgust from sadness and diagnose which is relevant for the moral violation in question.

Questions about the role of emotions in moral judgment have animated recent moral psychology and philosophy, leading researchers to examine whether emotions or deliberative reasoning dominate moral judgments. Given the prominence of emotions in recent theories of moral judgment, we believe the next important question is: under what conditions can people use emotions for moral judgments in skillful, rational ways? Cultivating emotion differentiation might help people master their passions and achieve the moral emotional wisdom espoused most famously by Aristotle (1941): "Those who

Table 2
Estimated marginal means and within-cell standard deviations of moral judgment by prime type and emotion differentiation training condition, Experiment 2.

	Disgust prime *M*	*SD*	Neutral prime *M*	*SD*
Control condition	4.05	.43	3.96	.49
Training condition	4.18	.44	4.22	.37

are angry at the right things and with the right people, and further, as they ought, when they ought, and as long as they ought, are praised."

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