

Judging Fatness: The Effects of Emotion on
Moral Judgment and Moral Judgment on Emotion

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Submitted in partial fulfillment of Honors Requirements
for the Department of Psychology

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May 19, 2010

EFFECTS OF EMOTION ON MORAL JUDGMENT

Abstract

Research regarding the CAD Triad Hypothesis shows that three specific emotions (contempt, anger, and disgust) are associated with three matched types of moral transgressions (community, autonomy, and divinity). The current studies examined the relationship between emotion and moral judgment of these moral transgressions in the context of fatness, a highly moralized characteristic in the U.S. In Study 1, disgust of college student participants and the weight of a protagonist were manipulated and participants were asked to make moral judgments in response to several hypothetical situations. Contrary to predictions, neither disgust nor the presence of an overweight protagonist was associated with more severe moral judgments. Disgust sensitivity and antifat attitudes did not play a notable role in the predicted relationship between disgust and moral judgment. Study 2 examined associations between the three CAD transgressions and their matched CAD emotions in a sample of women from a local gym. Partial support was found in that *divinity* transgressions made by overweight individuals were more likely to be judged with disgust than anger or contempt, and *autonomy* transgressions were more likely to be judged with anger than contempt. These studies have important implications for our understanding of how and why moral judgments are made with regards to overweight individuals.

Judging Fatness: The Effects of Emotion on Moral Judgment and Moral Judgment on Emotion

Most Americans are concerned with their own weight and the weight of others. In fact, United States society has defined widely held ideas of the thin ideal, or weight-based ideas of attractiveness (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Overweight individuals experience prejudice in many domains of life, including education, the workplace, healthcare, and within the family (Crandall, Nierman, & Hebl, 2009). Even children have been shown to find “something wrong” with obese individuals (Klaczynski, 2008, p. 68). We often make moral judgments of others based on physical appearance, and in general tend to think less of those who are overweight. What role does emotion play in our judgments of overweight individuals?

Moralization is the process by which a personal choice or preference becomes a value. This is both an individual and a cultural process that occurs over time (Rozin, 1999). As opposed to preferences, values are more internalized and influence an individual and a society more powerfully. This is due, in part, to the fact that moralized activities tend to involve more emotion, particularly disgust. Moralized behaviors are considered to reflect “bad” moral choices rather than personal preferences (Rozin, 1999; Rozin, Markwith, & Stoess, 1997). For example, in the decades following the 1950s, cigarette smoking changed from a purely preferential decision to a highly moralized choice (Brandt, 1998). Similarly, fatness is an issue that for years has also been viewed in a moral context (Farrell, in press).

Although stigmatization is a component of moralization (Rozin, 1997), the moralization of fatness is more than simple stigmatization or disliking of fat people. A behavior is moralized when it is considered an inherently bad moral act. Moralization is also

based more heavily on values than stigmatization. Specifically, moralization of a person based on his or her weight involves negative value judgments of that person's character: because a person is overweight, we assume that person has character flaws or is a bad person. The moralization of fatness is not a new concept. In fact, the origin of fat as a moral issue dates back to the late 1800s (Farrell, in press). By this time, a fat body was considered deficient and associated with gluttony while a thin body was considered to be closer to God and associated with ideas of control, constraint, and purity (Griffith, 2004). These associations developed in the Protestant point of view from pre-existing links, dating back to as early as the 16th century, to a racial hierarchy. By the 1800s, fat was associated with *primitive* humans, those who were not white. Those who were becoming fat were considered to be less civilized (Farrell, in press). American industrialization led to the production of a consumer nation and soon countered these Protestant ideas of delayed gratification. As Americans became guilty about this growing cultural excess, the United States obsession with thinness began (Schwartz, 1986; Stearns, 1997). Succumbing to the consumer pleasures of buying, spending, and generally enjoying recreational time was considered "dirty, impure, and un-Christian" (Farrell, in press, chapter 2).

Another explanation for moralized attitudes toward fatness comes from ideas of religious and secular morality. Protestant views of health gave rise to what Katz (1997) refers to as secular morality, an idea that a health context motivates behavioral change. While individuals still hold religiously based values today, these values are now supported by epidemiology. Secular morality holds that it is one's personal responsibility to remain healthy and fit and that negative health behaviors such as smoking or eating fattening foods are moral transgressions. A secular morality view would describe fat people with phrases like

gluttony, lack of purity, and lack of personal responsibility. Attributions may also help explain why fat people are judged in society. Klaczynski (2008) explains that attribution theory can account for fat stereotypes. Attribution theory holds that every individual has personal control over his or her own weight and that if a person is overweight, it is due to an underlying flaw of character. Based on attribution theory, these moral flaws might be described with phrases like *lack of control, lack of willpower, weakness* (Farrell, in press).

Years of history show that fat people are judged in a moralized way, and it seems that emotion is key in understanding how people make moralized decisions. Research shows that a relationship exists between emotions and moral judgments, and moralized attitudes toward fatness are likely related to specific emotions. Moral appraisals are closely tied to social functioning and commitment-based relationships. Humans have evolved to react emotionally to social violations so as to keep society functioning well (Keltner, Horberg, & Oveis, 2006). Previous studies have found that different emotions lead to specific appraisals, which in turn lead to specific moral judgments. For example, the emotion of disgust is related to the moral concern of purity, one of three moral ethics that Shweder, Much, Mahapatra, and Park (1997) described, along with *community* and *autonomy*. Rozin, Lowery, Imada, and Haidt (1999) later mapped three moral emotions, contempt, anger, and disgust, onto these moral ethics. The ethic of *community* relies on concepts such as duty, hierarchy, and interdependency and has to do with societal or community-based roles. The emotion of contempt is related to the moral concern of *community*, such that a violation of *community* should lead one to feel contempt. The ethic of *autonomy* relies on concepts of harm, rights, and justice and relates to issues of individual choice, will, and preference. This moral ethic is tied to anger. Finally, the ethic of *divinity* has to do with the natural order of things, purity, sanctity, sin, and pollution.

This moral ethic is tied to disgust (Shweder et al., 1997). Further research has also supported the relationships between these moral ethics and moral emotions. Rozin et al. (1999) demonstrated in what they called the *CAD Triad Hypothesis* that participants reading about violations of each CAD ethic (Community, Autonomy, and Divinity) reacted most frequently with the appropriate CAD emotion (Contempt, Anger, and Disgust), respectively. That is, after people read about a particular moral transgression (e.g., transgression of *community*) they were more likely to react with emotions matching that moral transgression (e.g., contempt).

While this research demonstrates that particular moral ethics and transgressions can lead to related morally-based emotions, other research suggests the inverse may be true as well: that certain emotions can impact the moral judgments that one makes. Of particular interest, research has shown that the manipulation of feelings of disgust increase moral judgment whereas feelings of purity can decrease moral judgments (e.g. Schnall, Benton, & Harvey, 2008; Schnall, Haidt, Clore, & Jordan, 2008; Haidt, Rozin, McCauley, & Imada, 1997). Disgust is a powerful negative emotion that has been found to be an important element of moralization (Rozin & Singh, 1999). Disgust is often related to contamination, and is an evolutionary adaptation that prevents harm or infection (Haidt, Rozin, McCauley, & Imada, 1997). In addition to direct contamination, disgust can also be elicited by something that is not disgusting on its own, but is perceived to be similar to a disgusting item (Haidt et al., 1997). Haidt, McCauley, and Rozin (1994) discussed seven different domains of disgust elicitors, including food, animals, body products, sex, envelope violations, death, and hygiene. Foods, animals, and body products are categorized as *core disgust*, a type of disgust which generally leads to a cautionary reaction, such as food avoidance (Haidt et al., 1997).

Humans, especially in Western nations, have further expanded this basic concept of core disgust to include social and moral disgust. Sexual violations such as homosexuality or incest and body envelope violations like bloody accidents or physical deformities tend to elicit disgust in the sense that they remind us of our animal nature and deviate from societal norms (Haidt et al., 1997). Additionally, the idea of disgust among humans has expanded to the point where immoral acts, such as racism, hypocrisy, and certain political attitudes, are often described as being disgusting (Haidt et al., 1997; Schnall et al., 2008). A study comparing health and moral vegetarians also demonstrated a link between disgust and morality, showing that vegetarians who avoid meat for moral reasons are more strongly influenced in their decision by feelings of disgust than those who avoid meat for health reasons (Rozin et al., 1997).

This link between disgust and morality has been tested through experimental research, showing that manipulating disgust can influence moral judgments. For example, in a study conducted by Schnall, Haidt, Clore, and Jordan (2008), participants exposed to a disgusting smell made more severe moral judgments in response to four morality-related vignettes than did those in the control condition. Interestingly, disgust did not have an influence on non-moral judgments, and negative emotions other than disgust, such as sadness, did not have an effect on moral judgments (Schnall et al., 2008). A similar study conducted by Schnall, Benton, and Harvey (2008) manipulated disgust in participants with the use of a film clip and measured their moral judgments in response to six vignettes. Participants who were asked to engage in the cleansing activity of washing their hands before reading the vignettes made significantly less severe moral judgments than those who did not

wash their hands. Thus, manipulating disgust is sufficiently powerful to increase moral judgments and manipulating a sense of cleanliness is sufficiently powerful to decrease them.

Study 1 expanded on research by Schnall and colleagues (2008) and research on the CAD Triad Hypothesis (Rozin et al., 1999) as it applies to moralization of fat individuals. Specifically, a 2 (disgust manipulation: experimental vs. control) x 2 (overweight protagonist: yes vs. no) design was used in which participants were either manipulated to feel disgusted or not and read about a person who was either described as overweight or in which the individual's weight was not mentioned. Participants read (and made moral judgments about) several moral transgression scenarios pertaining to transgressions of *community*, *autonomy*, and *divinity*. Based on previous research, a main effect of disgust was predicted, such that individuals who were made to feel disgusted would make more severe moral judgments than those who did not feel disgusted. A main effect of weight was also predicted, such that participants reading scenarios in which the individual making the moral transgression was described as overweight would make more severe moral judgments about the person than those reading scenarios in which weight was not mentioned. An interaction was also predicted such that those participants in the disgust condition reading about transgressions made by an overweight individual would make the most severe moral judgments of any group. Finally, because the emotion of disgust has been shown to relate to violations of *divinity*, it was hypothesized that moral judgments would be most severe for scenarios involving transgressions of *divinity* as opposed to transgressions involving *community* or *autonomy*.

Study 2 extended Rozin et al.'s (1999) CAD Triad research and examined whether the same relationship between moral judgment and subsequent CAD emotions could be

found with regards to overweight moral transgressors. Knowing that specific emotions result from specific moral transgressions (Rozin et al., 1999; Shweder, 1997) and understanding that fatness is a moralized construct, it was hypothesized that participants reading about CAD transgressions committed by fat individuals would be most likely to react with the appropriate CAD emotion. That is, those reading about a transgression of *community* would react with contempt, those reading about a transgression of *autonomy* would react with anger, and those reading about a transgression of *divinity* would react with disgust. Additionally, because the emotion of annoyance may be a milder form of anger and one which is more socially acceptable to for women to express, it was hypothesized that annoyance would be experienced more strongly than the other emotions in response to transgressions of *autonomy*.

Study 1

Method

Participants. A convenience sample of 14 male participants and 51 female participants ($N = 65$) was used, ranging in age from 18 to 23 years ($M = 19.34$, $SD = 1.34$). Participants were recruited from an undergraduate participant pool at a small liberal arts college in Pennsylvania and ranged in Body Mass Index (BMI) from 18.46 to 46.92 ($M = 23.52$, $SD = 4.96$). According to BMI standards, 1.54% of the sample was underweight, 75.38% of the sample was a normal weight, 15.38% was overweight, and 7.69% was obese.

Materials. The 15 to 20 minute survey created for this study was developed using Snap 9 Professional Survey Software and was administered on a computer. Participants were first asked to answer a few questions about the film clip they had just watched. These questions were followed by a brief manipulation check that asked participants to rate their

current emotions. The survey asked participants to respond to a series of questions related to nine moral transgression scenarios, followed by an antifat attitudes scale and a disgust sensitivity scale. In addition to basic demographic information, participants were asked to record their height and weight. These values were used to calculate body mass index (BMI). BMI was measured for descriptive purposes only. A final item asked participants to record what they thought the study was about in order to test for suspicion.

Manipulation of disgust. Participants in the experimental condition watched a clip involving an intoxicated female teenager vomiting in a public toilet. The actor proceeds to accidentally drop her cell phone and gum in the toilet and reaches into her own vomit to find them. Participants in the control condition watched a neutral clip involving a teenage male and female speaking on the phone, making plans to meet up later at a restaurant. Both film clips were less than 2 minutes in length and were from the same movie, *Nick and Norah's Infinite Playlist*. Immediately following the film clip, participants were asked to respond to three questions. These items were intended to support the cover story that the films were part of a short first study and were unrelated to later survey items. The film clip items asked, "Have you seen this movie before?" "Think about the clip you just watched and write the first three words that come to mind," and "What other reactions do you have to the video clip?" These items were not used in any analyses.

Manipulation check. Participants were asked to rate to what extent they experienced eleven emotions soon after viewing the film, including a range of emotion words such as pleased, happy, upset, and depressed, as well as three disgust-related words (*disgusted*, *repulsed*, and *grossed out*) on a scale from 1 (*don't feel at all*) to 9 (*feel very strongly*). The three disgust scores were combined into one measure and had a Cronbach's alpha of .98 ($M =$

4.50, $SD = 0.26$). This measure was derived from Schnall et al. (2008), although the words “repulsed” and “grossed out” were subsequently added.

Moral transgression scenarios. Participants were presented with nine hypothetical scenarios involving an individual committing a moral transgression (see Appendix A). Three scenarios involved transgressions of *community*, three of *autonomy*, and three of *divinity*. Half of the participants read scenarios in which the protagonist committing the transgression was overweight and half read scenarios in which the protagonist’s weight was not specified. After each scenario, participants in all conditions answered two questions addressing the morality of the protagonist: “How moral are the man’s [woman’s] actions in this particular situation?” and “How moral would you expect this man [woman] to be in general?” Responses ranged from 1 (*extremely immoral*) to 8 (*perfectly moral*) with lower scores representing more severe moral judgments. Correlational analyses showed that these two morality items were highly correlated with each other within each of the three sets of scenarios. Thus, they were combined into a single moral judgment score. This moral judgment score was combined for the three *community* scenarios, the three *autonomy* scenarios, and the three *divinity* scenarios so that there was a single moral judgment score for each of the three types of moral transgressions. The scenarios and the two follow-up items were self-developed, but the three types of moral transgressions (transgressions of community, autonomy, and divinity) presented in the scenarios were based on scenarios created by Rozin, Lowery, Imada, and Haidt (1999).

Antifat attitudes scale. The antifat attitudes scale was developed by Crandall (2004). It consisted of 13 statements about beliefs and attitudes toward overweight individuals. This measure included statements like, “I really don’t like fat people much,” “I have a hard time

taking fat people too seriously,” “If I were an employer looking to hire, I might avoid hiring a fat person,” and “Fat people tend to be fat pretty much through their own fault.” This scale consists of three subscales measuring *dislike of fatness*, *willpower*, and *fear of fat*. The three *fear of fat* items were excluded in analyses since this was not a variable of interest to the current study. All ten other items, rated on a 10-point Likert scale from 0 (*strongly disagree*) to 9 (*strongly agree*), were combined into a single measure. Cronbach’s alpha was .86 ($M = 4.03$, $SD = 1.55$).

Disgust sensitivity scale. Disgust sensitivity was measured using a scale developed by Haidt, McCauley, and Rozin (1994). The scale consisted of 13 true or false statements and 12 3-point Likert scale statements. True or false statements included items such as, “It would bother me to see a rat run across my path in a park,” “I never let any part of my body touch the toilet seat in public restrooms,” and “If I see someone vomit, it makes me sick to my stomach.” Likert scale items included statements such as, “Your friend’s pet cat dies, and you have to pick up the dead body with your bare hands,” “A friend offers you a piece of chocolate shaped like dog-doo,” and “You see maggots on a piece of meat in an outdoor garbage pail,” and asked participants to rate their how disgusting they thought the statement was on a scale of 1 (*not very disgusting*) to 3 (*very disgusting*). Some items were reverse coded, and scores in each section were converted to a score from 0 to 1 and combined into a single scale with a Cronbach’s alpha of .83 ($M = 0.65$, $SD = 0.43$). Specifically, on the three-point scale, a score of a 1 became a 0, a 2 became a 0.5, and a 3 became a 1. A true response was recoded as a 1 and a false response was recoded as a 0.

Procedure. Participation was voluntary and each participant was granted credit towards a participation requirement. The experiment included four conditions: an

experimental disgusting film clip condition with scenarios about either an overweight or non-overweight protagonist, and a neutral film clip control condition with scenarios about either an overweight or non-overweight protagonist. Participants were randomly assigned to one of the four conditions prior to their arrival. Participants reported to a computer lab and were assigned to a predetermined computer matching the condition to which they were assigned. They were asked to read an informed consent form and were told that by proceeding with the study they were giving their consent to participate. The researcher explained that participants would complete two short studies, the first of which would involve watching a film clip and answering a few questions about it. They were told the second study would ask them to make several moral judgments. This cover story was used so that participants would not knowingly connect the film clips to their later survey responses. Participants were asked to put on a pair of headphones and watch the film clip open on the computer screen. Once the clip ended, participants were instructed to proceed immediately with the survey, also open on the computer. Upon completing the survey, participants were asked about their suspicions and debriefed. Responses to these final questions suggested that participants were not aware of the true purpose of the study. Therefore, no participants were excluded from the sample.

Results

Manipulation check. A one-way ANOVA was conducted to test for differences in combined disgust ratings between those in the disgusting and control film clip groups. As expected, participants in the disgusting film clip group were significantly more disgusted ($M = 7.44$, $SD = 1.66$) than those in the control film clip group ($M = 1.24$, $SD = 0.52$), $F(1, 60) = 379.63$, $p < .001$. Several other one-way ANOVAs were conducted to determine whether the remaining eight emotions also differed significantly between groups. All eight emotions

did in fact differ significantly, $F_s > 5.39$, $p_s < .02$, between the disgusting and control film clip groups. Specifically, compared to the control film clip group, people who watched the disgusting clip reported feeling more anger, depression, sadness, and outrage and less happiness, excitement, pleasure, and compassion.

Do disgust and overweight protagonists increase the severity of moral judgments? It was hypothesized that participants in the disgusting film clip condition would produce more severe moral judgments than those in the control film clip condition. It was also predicted that participants reading scenarios about overweight protagonists would make more severe moral judgments than those reading about non-overweight protagonists. Finally, an interaction was predicted such that those who were disgusted and who read about overweight protagonists would make more severe moral judgments than those in each of the other three groups. Three 2 (disgust manipulation: experimental vs. control) x 2 (overweight protagonist: yes vs. no) ANOVAs were conducted, one for each category of transgressions, *community*, *autonomy*, and *divinity* (see Tables 1-3 for means and standard deviations). For transgressions of *community*, the 2x2 ANOVA showed the interaction was not significant, $F(1, 59) = .01$, $p = .92$, $\eta_p^2 = .00$. Similarly, the main effects for disgust, $F(1, 59) = 1.98$, $p = .16$, $\eta_p^2 = .03$, and weight of the scenario protagonist, $F(1, 59) = 2.41$, $p = .13$, $\eta_p^2 = .04$, were not significant. For transgressions of *autonomy*, the interaction, $F(1, 59) = 2.48$, $p = .12$, $\eta_p^2 = .04$, main effect of disgust, $F(1, 59) = .43$, $p = .51$, $\eta_p^2 = .01$, and main effect of scenario protagonist weight, $F(1, 59) = 1.0$, $p = .32$, $\eta_p^2 = .02$, were also not significant. Finally, for transgressions of *divinity*, the interaction, $F(1, 59) = .01$, $p = .92$, $\eta_p^2 = .00$, main effect of disgust, $F(1, 59) = 1.54$, $p = .22$, $\eta_p^2 = .03$, and main effect of scenario protagonist weight, $F(1, 59) = .29$, $p = .59$, $\eta_p^2 = .01$, were not significant.

Were moral judgments most severe when a transgression of divinity was made?

It was hypothesized that among participants in the disgust condition, moral judgments would be more severe for the transgressions of *divinity* than those of *community* and *autonomy*.

However, the analyses above showed that the disgust condition did not lead to changes in the moral judgments of the *divinity* scenarios. Thus, this hypothesis was not supported.

Post hoc analyses: Disgust sensitivity and antifat attitudes. A study by Haidt et al. (1994) showed that certain individuals are particularly sensitive to feeling disgust.

Furthermore, Schnall et al. (2008) found that the disgust manipulation worked differently for certain personality characteristics. Thus, a median split procedure was used to create high and low disgust sensitivity groups. A median split was also used to divide participants into high and low antifat attitudes. In order to test whether or not disgust sensitivity had an effect on participants' moral judgments, three 2 (disgust manipulation: experimental vs. control) x 2 (overweight protagonist: yes vs. no) x 2 (disgust sensitivity: high vs. low) ANOVAs were conducted, one for each set of moral transgression scenarios. The focus here was only on examining whether disgust sensitivity interacted with the other two independent variables, specifically whether the pattern of results was different for individuals high or low in disgust sensitivity. For both the *autonomy* and *divinity* scenarios, there were no significant main effects or interactions, $F_s < 5.40$, $p_s > .09$. However, for the *community* transgression scenarios, a three-way interaction was present, $F(1, 55) = 3.90$, $p = .05$, $\eta_p^2 = .07$. Follow-up 2 (scenario protagonist weight) x 2 (film clip group) ANOVAs were conducted separately for the low and high disgust sensitivity groups. In the low disgust sensitivity group, there was a main effect of film clip group, such that those in the control film clip group made more severe moral judgments ($M = 4.64$, $SD = 1.47$) than those in the disgusting film clip group

($M = 5.76$, $SD = 1.22$), $F(1, 26) = 4.46$, $p = .04$, $\eta_p^2 = .15$. No other main effects or interactions were significant, $F_s < 1.44$, $p_s > .24$. In the high disgust sensitivity group, there was a main effect of scenario protagonist weight, such that those reading about overweight individuals made more severe moral judgments ($M = 4.14$, $SD = 1.35$) than those reading about non-overweight individuals ($M = 5.27$, $SD = 1.32$), $F(1, 29) = 7.66$, $p = .01$, $\eta_p^2 = .21$. No other main effects or interactions were significant, $F_s < 2.57$, $p_s > .12$. Because the interactions among the low and high disgust sensitivity groups were not significant, it can be concluded that disgust sensitivity did not play a role in the relationship between disgust condition and scenario protagonist weight among *community* scenarios.

Because general attitudes toward fatness may affect the way moral judgments are made, antifat attitudes were measured as an individual difference variable. To examine the effects of antifat attitudes on moral judgments, another set of three 2 (disgust condition: experimental vs. control) x 2 (scenario protagonist weight: overweight vs. non-overweight) x 2 (antifat attitudes: high vs. low) ANOVAs were conducted, one for each set of moral transgression scenarios. These analyses were conducted with particular interest in a three-way interaction, since this would suggest that antifat attitudes have an effect on the relationship between disgust condition and scenario protagonist weight. When the 2x2x2 ANOVA was conducted for the *autonomy* scenarios, there were no significant main effects or interactions, $F_s < 2.92$, $p_s > .09$. However, interactions were present for the *community* and *divinity* scenarios. First, for the *community* transgression scenarios, there was a significant three-way interaction, $F(1, 55) = 5.74$, $p = .02$, $\eta_p^2 = .10$. A follow-up 2 (disgust condition) x 2 (scenario protagonist weight) ANOVA was conducted separately for the high and low antifat attitudes groups in order to examine the nature of this interaction. No main effects or

interactions were significant, $F_s < 3.41$, $p_s > .08$. Therefore, no further follow-up ANOVAs were conducted, and it was concluded that antifat attitudes did not have an effect on the relationship between disgust condition and scenario protagonist weight for *community* transgression scenarios.

Second, for *divinity* scenarios, there was also a significant three-way interaction, $F(1, 55) = 9.05$, $p < .01$, $\eta_p^2 = .14$, between disgust condition, scenario protagonist weight, and antifat attitudes. This three-way interaction can be explained by a two-way interaction in the low antifat attitudes group, $F(1, 27) = 5.42$, $p = .03$, $\eta_p^2 = .17$, which was absent in the high antifat attitudes group, $F(1, 28) = 3.90$, $p = .06$, $\eta_p^2 = .12$. Examination of the nature of this interaction in the low antifat attitudes group showed that among those who read about a non-overweight individual, participants who were disgusted made less severe moral judgments ($M = 6.04$, $SD = 1.12$) than those not disgusted ($M = 4.83$, $SD = 0.87$), $F(1, 14) = 5.80$, $p = .03$, $d = 1.21$. On the other hand, among those who read about an overweight individual, participants who were disgusted ($M = 5.13$, $SD = 1.27$) did not differ in their moral attitudes from those who were not disgusted ($M = 5.92$, $SD = 1.45$), $F(1, 13) = 1.24$, $p = .29$, $d = .58$. Because people high in antifat attitudes were generally expected to make more severe moral judgments toward overweight individuals, it is surprising that this interaction was found among participants with low antifat attitudes rather than high antifat attitudes. That the significant difference in means was found among those who read about non-overweight individuals also does not support the expected result. Thus, antifat attitudes do not seem to explain why being disgusted did not have the predicted effect on moral judgments.

In sum, the disgust manipulation and the presence of an overweight scenario protagonist did not lead to more severe moral judgments and the personality characteristics

of disgust sensitivity and antifat attitudes did not help explain why the manipulation did not have the expected effect.

Discussion

The primary aims of the first study were to determine whether feelings of disgust increase moral judgment, whether moral judgments are more severe when the person being judged is overweight, whether the combination of disgusted individuals making judgments about overweight people would increase moral judgments, and whether participants who were disgusted reacted more strongly to *divinity* violations than those who were not disgusted. Disgust was successfully manipulated by showing participants a disgusting clip from a contemporary film, but a host of other emotions were also created, casting doubt on the true impact of disgust.

Contrary to predictions, the results did not show that people feeling disgusted (compared to not feeling disgusted) made more severe moral judgments across any of the three types of transgression scenarios. These results are inconsistent with research by Schnall et al. (2008) who demonstrated that moral judgments increased when people were made to feel disgusted. Furthermore, given the widespread antifat sentiment in our culture, it was surprising that the overweight protagonist (relative to a non-overweight protagonist) did not have a differential effect on participants' moral judgments.

Individual difference variables of both disgust sensitivity and antifat attitudes were examined to determine whether they played a role in these results. Although some three-way interactions were significant, follow-up analyses showed that neither disgust sensitivity nor antifat attitudes could help explain why feeling disgusted and reading about overweight scenario protagonists did not lead to more severe moral judgments as predicted.

There are several limitations to the current study that may help explain the lack of results. First, while the manipulation of disgust was successful, results also showed that eight additional emotions differed between the disgusting and control film clip. Emotion ratings were higher in the disgusting film clip group for all negative emotions relative to the control film clip group. This suggests that perhaps it was simply a collection of negative emotions, rather than the specific emotion of disgust, that was manipulated and may have affected the moral judgments that participants made. Second, there may have been a social desirability bias present in participants' responses. Participants in the condition involving overweight scenario protagonists read nine scenarios in which the protagonist making moral transgressions was overtly described as being overweight. Since it was obvious to participants that they were being asked to make moral judgments of overweight individuals, a commonly moralized group, perhaps they adjusted their responses in order to appear less judgmental. It might have been better to have a picture accompany the descriptions instead to indicate that the person was (or was not overweight). It is clear that fatness is a highly moralized construct in society. If the majority of people already hold moral judgments toward overweight individuals, it may be difficult to increase these moral judgments, despite increasing their disgust. Finally, there are some possible weaknesses of the self-developed scenarios used in this study, which will be discussed more fully in the general discussion.

This first study examined the effects of a particular emotion, disgust, on moral judgments of overweight individuals. In an extension of the CAD Triad Hypothesis (Rozin et al., 1999), the next study examined the inverse relationship to determine whether moral judgments made about specific types of transgressions committed by overweight individuals lead people to feel specific related emotions. Specifically, it was expected that transgressions

of *community* would lead most strongly to the emotion of contempt, transgressions of *autonomy* would lead most strongly to the emotion of anger (or its weaker, more socially acceptable form, annoyance), and transgressions of *divinity* would lead most strongly to the emotion of disgust.

Study 2

Method

Participants. A convenience sample of 60 women was used, ranging in age from 35 to 82 ($M = 61.84$, $SD = 11.73$). Study 2 used a community sample of only women in order to examine a group different from that used in Study 1 and to create a more homogenous sample. The sample was entirely Caucasian (96.7%) apart from one African American woman and one Asian-American woman. Participants were recruited from a gym in Pennsylvania in order to provide a more diverse sample. Of these 60 participants, 35% were educated up to the high school/GED level, 30% had completed some college, 6% graduated from college, and 22% had a graduate or other professional degree. Body Mass Index (BMI) of participants ranged from 18.7 to 42.9 ($M = 28.49$, $SD = 5.52$). According to BMI standards, 30% of the sample was a normal weight, 33.33% was overweight, and 35% was obese. No one in the sample was underweight.

Materials. A ten-minute survey asked participants to read a series of nine self-developed moral transgression scenarios that were similar to, but not exactly the same as those used in Study 1 (see Appendix B). After each scenario, participants were asked to indicate the extent to which they felt each of five emotions. These scenarios were followed by the antifat attitudes scale and a series of demographic items, including self-reported height and weight which were used to calculate body mass index (BMI).

Moral transgression scenarios. Similarly to Study 1, participants were presented with nine hypothetical scenarios involving an individual committing a moral transgression. There were again three *community*, three *autonomy*, and three *divinity* transgression scenarios. Unlike Study 1, all participants in Study 2 read the same nine scenarios about an overweight individual. The nine scenarios were presented in five different counterbalanced orders to account for order effects, which were a concern since Study 2 used a within-subjects design. After each scenario, participants rated how much they felt contempt, anger, disgust, annoyance, and pity towards the person making the transgression. Ratings for each emotion were made on a 5-point Likert scale from 1 (*not at all*) to 5 (*very much*). The rating scale and scenarios were self-developed, but were based on scenarios and dependent measures used by Rozin, et al. (1999). Annoyance and pity were not emotions measured by Rozin et al. (1999). Annoyance was added under the assumption that it is a milder form of anger that is more socially acceptable to express. Pity was included in this survey as a potential variable of interest and measured on the same scale as the other emotions but was ultimately not used in any analyses.

Antifat attitudes scale. The same antifat attitudes scale (Crandall, 1994) used in Study 1 was used in Study 2. Again, only the ten dislike and willpower items were included in the final antifat attitudes score. Cronbach's alpha was .76 ($M = 2.77$, $SD = 1.44$).

Procedure. Women entering and exiting the Curves gym were asked if they were interested in filling out a brief survey and told they would be given \$5 in cash for their participation. Those who were willing to participate were informed in writing that by proceeding with the survey they were giving their consent to participate. Once participants

completed the survey, they were given a written debriefing form which explained the purpose of the study and were free to leave.

Results

It was hypothesized that participants reading about specific CAD transgressions committed by overweight individuals would react with the appropriate corresponding CAD emotion. For example, those reading about a transgression of *community* would react with contempt more so than anger or disgust, those reading about a transgression of *autonomy* would react with anger (or its milder form, annoyance) more so than contempt and disgust, and those reading about a transgression of *divinity* would react with disgust more so than anger and contempt.

Primary analyses. A 3 (domain: community, autonomy, divinity) x 4 (emotion: contempt, anger, disgust, annoyance) repeated measures ANOVA examined the 4 hypotheses. Of importance was the expectation of an interaction between domain and emotion with specific examination of the emotional reactions to each of the three domains. Results showed a significant main effect of emotion, $F(3, 162) = 25.39, p < .10, \eta_p^2 = .32$. Specifically, participants felt mostly annoyance ($M = 2.88, SD = 1.03$), followed by disgust ($M = 2.83, SD = 1.13$), anger ($M = 2.50, SD = 1.06$), and finally contempt ($M = 2.34, SD = 1.07$). All means were significantly different from each other, $ts > 17.04, ps < .05$. There was also a significant main effect of domain, $F(2, 108) = 27.60, p < .01, \eta_p^2 = .34$, such that emotions in general were experienced most strongly among transgressions of *autonomy* ($M = 2.72, SD = 1.11$), followed by *community* ($M = 2.68, SD = 1.16$), and finally *divinity* ($M = 2.27, SD = 1.12$). Again, all means were significantly different from each other, $ts > 16.55, ps < .05$.

As predicted, the 3x4 ANOVA showed a significant interaction between domain and emotion, $F(6, 324) = 19.43, p < .01, \eta_p^2 = .27$ (see Figure 1 for means and Table 4 for significance levels). For *community* transgression scenarios, participants felt annoyance most strongly, followed by disgust, anger, and finally contempt, although as seen in Table 4 annoyance and disgust did not differ significantly, nor did disgust and anger. This result is contrary to the hypothesis that contempt would be experienced more strongly than the other emotions in response to *community* transgression scenarios. For *autonomy* transgression scenarios, participants felt annoyance most strongly, followed by anger, disgust, and finally contempt. Partially consistent with predictions, although anger was not felt significantly more strongly than disgust, it was felt significantly more strongly than contempt. It is also consistent with predictions that annoyance was felt most strongly. Finally, for *divinity* scenarios, participants felt disgust most strongly, followed by annoyance, contempt, and lastly anger. This result is consistent with predictions in that disgust was experienced significantly more strongly than the other CAD emotions, as well as annoyance. In sum, the CAD triad was supported in that disgust was felt most strongly among *divinity* scenarios, partially supported in that anger was felt more strongly than contempt among *autonomy* scenarios, and not supported in that contempt was experienced the least of all emotions among *community* scenarios. Finally, additional predictions were also supported in that annoyance was felt most strongly among *autonomy* scenarios.

Post hoc analyses. Antifat attitudes was examined as an individual difference variable to determine whether the relationships between the CAD ethics and the CAD emotions were affected by whether a participant was high or low in these attitudes. A three-way interaction was expected for a 3 (domain: community, autonomy, divinity) x 4 (emotion:

contempt, anger, disgust, annoyance) x 2 (antifat attitudes: high vs. low) mixed ANOVA in which the Domain x Emotion interaction should show a different pattern for those with low as opposed to high antifat attitudes as this would suggest that antifat attitudes interact with the pattern that exists between the CAD ethics and emotions. Results showed a significant main effect of antifat attitudes on emotion, $F(1, 53) = 8.70, p < .01, \eta_p^2 = .14$, and a significant interaction between emotion and antifat attitudes, $F(3, 159) = 2.91, p = .04, \eta_p^2 = .05$. Since these results were of no consequence to the current study, they were not further analyzed. The expected three-way interaction between domain, emotion, and antifat attitudes was not significant, $F(6, 318) = .41, p = .88, \eta_p^2 = .01$.

Discussion

The primary aim of Study 2 was to determine whether specific CAD transgressions were associated with the expected CAD emotions when participants were reading about overweight individuals. Contrary to predictions, participants did not feel significantly more contemptuous after reading about transgressions of *community*. In fact, they felt less contempt following these scenarios than any other emotion tested. The CAD triad hypothesis suggests that the emotion of contempt should be closely related to the ethic of *community*, so this result was surprising. Perhaps the emotion of contempt is less well understood in today's society than the emotions of anger and disgust. Means were relatively similar among all four emotions in response to transgressions of *community*, so it is also possible that the way these scenarios were written led to more of a general emotional reaction rather than specifically making people feel contemptuous.

Somewhat consistent with predictions, transgressions of *autonomy* led participants to feel more anger than contempt and disgust, although the difference between anger and

disgust was not significant. Additionally, predictions were supported in that annoyance was experienced more strongly than any of the other emotions measured. This result is in partial support of findings by Rozin et al. (1999), which suggest that the emotion of anger relates closely to the ethic of *autonomy*.

Finally, participants also felt significantly more disgusted than the other emotions after reading about an overweight individual committing a transgression of *divinity*. This finding is consistent with previous research that shows that the emotion of disgust is closely tied to the ethic of *divinity* or purity (Rozin et al., 1999). Interestingly, disgust ratings were not substantially higher following *divinity* scenarios as compared to *community* and *autonomy* scenarios. Instead, it seems that contempt and anger were comparatively lower following *divinity* scenarios than they were following *community* and *autonomy* scenarios. It is possible that something about the wording of the *divinity* scenarios caused anger and contempt to decrease. Horberg, Oveis, Keltner, and Cohen (2009) demonstrated the strong relationship between disgust and purity, or *divinity*. They stressed that only disgust, and not other negative emotions, are tied to the moralization of purity. Perhaps the strength of the relationship between negative emotions and the moralization of purity is unique to disgust and *divinity*, leading to minimal reactions of anger and contempt in response to transgressions of *divinity*, whereas the domains of *autonomy* and *community* are more affected by negative emotions in general.

Results showed that having high or low antifat attitudes did not have a significant impact on moral domains and moral emotions. Perhaps there are other individual difference variables, such as general sensitivity to emotion that might play a stronger role in this CAD pattern.

General Discussion

Two studies examined the relationship between emotions and moral judgment. Results of Study 1 suggested that, contrary to hypotheses and previous research, the emotion of disgust did not increase the severity of moral judgments made. Similarly, when the individual committing a moral transgression was overweight, results showed that participants did not make moral judgments any more severe than they did if weight was not mentioned. Previous research (e.g. Schnall et al., 2008; Wheatley & Haidt, 2005) shows that disgust should increase moral judgment, especially in response to violations of *divinity*, or purity (Horberg et al., 2009), and that fat is a moralized construct. Both of these results were therefore unexpected.

Results of Study 2 showed that, as expected, participants felt significantly more disgust after reading about transgressions of *divinity* than the other CAD emotions of anger or contempt. In partial support of the hypothesis, participants also felt more anger than the other two CAD emotions in reaction to transgressions of *autonomy*, although the difference between anger and disgust did not reach significance. Although annoyance is not a CAD emotion, it is not surprising that participants experienced more annoyance than any other emotion in response to *autonomy* transgressions, considering that it seems to be a weakened form of anger that is more socially acceptable to express than anger. Finally, contrary to predictions, participants felt less contempt than anger and disgust after reading about a transgression of *community*. For the most part, these results support predictions and previous research suggesting that CAD emotions result from specifically related CAD moral transgressions (Rozin et al., 1999) and suggest that these relationships apply to situations in which a moral transgression is committed specifically by an overweight individual.

It is likely that there was a lack of support for the relationship between the ethic of *community* and the emotion of contempt because contempt is a less fully understood emotion than anger or disgust. While anger and disgust are emotions that are universally understood (Ekman, 1992) and frequently referred to within daily discourse, it is not clear whether the emotion of contempt is as easily understood in U.S. society. While some studies have found that contempt is generally understood (Ekman & Friesen, 1996; Ekman & Heider, 1988), others have found evidence that English speakers do not fully understand the word “contempt.” For example, Russell (1991) found that participants tended to classify an expression of contempt as disgust, rather than contempt. A lack of consensus on the definition of contempt poses a threat to the validity of survey items and scenarios asking about this emotion. In future replications of the current study, it would be useful to pretest participants’ understanding of this emotion or to provide participants with definitions or examples of each emotion before they begin the study.

Since it seems that annoyance is a milder form of anger and is more socially appropriate to express publicly, it is understandable that participants reacted more strongly to *autonomy* transgressions with annoyance than anger. It is less clear, however, why anger was not expressed more than disgust in reaction to these scenarios. The lack of complete support for the relationship between the ethic of *autonomy* and the emotion of anger, as well as the lack of significance related to transgressions of *autonomy* in Study 1 may be a result of a cultural effect. There is reason to believe that transgressions of *autonomy*, compared to *community* and *divinity*, are especially salient in American culture. The ethic of *autonomy* centers on ideas of harm, rights, and justice. As an individualistic society, the U.S. values liberty, independence, human rights, and self-reliance, which are closely related to the ideas

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of harm, rights, and justice that define the ethic of *autonomy* (Shweder et al., 1997).

Collectivist nations, such as the Philippines, are more likely to conceptualize morality equally among *community*, *autonomy*, and *divinity* (Vasquez, Keltner, Ebenbach, & Banaszynski, 2001). However, since the values related to autonomy are so important in U.S. society, this may have led to more extreme reactions to transgressions of *autonomy* in the current study and involved many emotions other than just anger. Similarly, it is possible that the three scenarios within each moral domain that were constructed for the current study are not equivalent in the strength of reaction they elicited. For example, perhaps an overweight individual taking up an armrest on a flight (transgression of *autonomy*) is less emotionally arousing than an overweight individual wearing a skimpy bathing suit on the beach (transgression of *divinity*). For future replications, these scenarios should be further pretested and altered in order to approach equality in terms of the degree of emotional arousal they elicit.

This study had a few important limitations. First, the scenarios were self-developed to include overweight protagonists based on the descriptions of the three CAD ethics by Shweder et al. (1997) and Rozin et al. (1999). As they have not been tested thoroughly and are not standardized, it is possible that the scenarios within each domain do not hold the same emotional weight and may not truly and accurately represent the correct type of moral transgression. Second, it is important to recognize that participants in these studies were asked to react to hypothetical situations. It is possible that reactions to these hypothetical situations may not be generalizable to true life moral situations and actual attitudes toward fatness. Finally, especially when asking participants to make moral judgments about a stigmatized group, social desirability response bias is a limitation of the current study.

Participants' responses to these hypothetical transgressions may not reflect their true feelings and attitudes.

In order to effectively expand our understanding of the ways in which emotion and moral judgment relate to each other, there are important future directions to consider in this area of research. First, it is important to consider both current and historical discourse about intuitionist versus rationalist reactions to moral situations. Since the 1700s, some have suggested that our emotions guide our moral reasoning and others have suggested that moral judgment occurs primarily as a result of reasoning (Monin et al., 2007). Currently, an *intuitive primacy* approach is dominant in the field, in which moral intuition occurs first and leads to moral judgment, but is often followed by a process of moral reasoning, which attempts to justify and find support for that judgment (Haidt & Kesebir, 2010). A variety of studies have been conducted that support the dominant role of emotion and intuition in moral judgment. For example, Damasio (1994) demonstrated that the ventro-medial prefrontal cortex is largely responsible for involving emotional information in the decision-making process, and is essential for moral judgment. When this area is damaged, participants still score highly on moral reasoning tasks and understand societal moral norms, but “lose the ability to know, instantly and intuitively, that ethically suspect actions should not be undertaken” (Haidt & Kesebir, 2010, p. 803). Similarly, research comparing psychopaths to non-psychopaths showed that psychopaths, who lack emotional empathy and tend to act amorally, do not distinguish between moral and non-moral violations (Nichols, 2002), suggesting that moral judgment depends heavily on emotional reactions.

Interestingly, research shows that individuals can often know intuitively that an action or situation is morally wrong, but remain unable to give a reason why (Haidt & Hersch, 2001;

Haidt, Koller, & Dias, 1993). This supports the theory that reasoning and justification of a moral judgment are distinct from and for the most part independently follow the process of judgment itself, which appears to be more of an intuitive reaction. When participants in these situations are forced to give a reason, they tend to remain attached to their initial reaction and demonstrate a confirmation bias, depending on evidence that supports that reaction (Haidt, 2001; Nickerson, 1998). The current studies set out to determine the relationship between emotion and moral judgment. However, the studies did so via tasks that are slow by cognitive process standards. It seems reasonable to conclude that what participants are recording in response to the moral scenarios is likely to reflect their moral reasoning, rather than their emotion-based moral intuitions. Schnall et al. (2008) conducted several studies examining the difference between moral and emotion-based reasoning. First, disgust was induced and participants were asked to make moral judgments based on their intuitive reactions. In a later experiment, this instruction was removed and it was expected that participants would think more fully and cognitively about their reactions. Results showed no difference in the severity of moral judgments between these groups. While this evidence suggests that moral judgments may not change as a function of rationalization and intuition, it is unclear whether participants in Schnall et al.'s study responded with their true intuitive reaction. As such, future research should use a more time-sensitive task (such as an implicit attitudes task) so that researchers can be more certain that they are recording the intuitive emotional reaction towards a moral situation rather than the moral reasoning and justification that follows this intuition. This type of measure may also reduce the concern of socially desirable responses.

Future research should also consider the relationship between emotion and morality regarding overweight individuals in the context of both cultural and social issues. Particularly

in the U.S., weight is an issue tied closely to socioeconomic status (Sobal & Stunkard, 1989). Research has shown that, among those who are low in SES, there is a particularly strong relationship between negative emotion and the classification of behaviors as immoral (Haidt et al., 1993). Additionally, although nonsignificant, there was a trend in research by Horberg et al. (2009) showing that lower SES participants (compared to higher SES participants) were more likely to make severe moral judgments of purity violations. With evidence suggesting that SES may play a role in moral judgments, it is of particular importance to study whether SES plays a role in the moral judgment of overweight individuals. Regardless of SES, the moral judgment of overweight individuals and the emotions that relate to that moral judgment may differ culturally. In particular, Vasquez (2001) points out that little research has studied the moral ethics of *community*, *autonomy*, and *divinity* as defined by Shweder et al. (1997). Shweder's research was based on studies conducted in India. It may be that studying moral judgment of overweight individuals in the U.S. based on these moral domains is not the most accurate method. Future directions should expand on this research, comparing the relationship between emotions and moral judgments of overweight individuals in the context of culture.

Weight-based prejudice, stigma, and discrimination are pervasive issues in the United States today and impact an overweight person's life in several domains, including mental health, education, the workplace, marriage and the family, health care, and social class (Crandall, Nierman, & Hebl, 2009). Such attitudes toward fatness have become normalized and have even been internalized by overweight individuals, so as to allow such prejudice to perpetuate (Crandall et al., 2009). As partially supported by the results of the current study, fatness is the frequent subject of moral judgment in the U.S. In fact, even the mere proximity

to a fat person can increase others' negative perceptions of an individual (Hebl & Mannix, 2003). But what is it that leads to such strong moral judgments, and what impact do these judgments have on overweight individuals? What can be done to change such attitudes and judgments? The relationship between moral judgment of fatness and emotion has important implications for the way we understand these questions and react to overweight individuals in society. Future directions should expand on this relationship and its impact on overweight individuals to help inform legislation related to weight-based discrimination and to expand our understanding of morality and emotion in the context of fat attitudes and stigmatization.

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Table 1

Moral Judgment Mean Ratings for Community Scenarios

Disgust Condition	Overweight Protagonist	<i>M</i>	<i>SD</i>	<i>N</i>
Experimental	Yes	4.83	1.42	16
	No	5.44	1.29	17
Control	Yes	4.37	1.71	14
	No	4.90	1.33	16

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Table 2

Moral Judgment Mean Ratings for Autonomy Scenarios

Disgust Condition	Overweight Protagonist	<i>M</i>	<i>SD</i>	<i>N</i>
Experimental	Yes	4.47	0.94	16
	No	4.63	0.96	17
Control	Yes	5.08	1.53	14
	No	4.38	0.88	16

Table 3

Moral Judgment Mean Ratings for Divinity Scenarios

Disgust Condition	Overweight Protagonist	<i>M</i>	<i>SD</i>	<i>N</i>
Experimental	Yes	5.46	1.19	16
	No	5.61	1.28	17
Control	Yes	5.00	1.71	14
	No	5.22	1.22	16

Table 4

Means and Significance Levels for CAD Triad Emotions (with Annoyance)

Domain	<u>Emotion</u>			
	Contempt	Anger	Disgust	Annoyance
Community	2.48 _a (1.13)	2.69 _b (1.15)	2.87 _{b,c} (1.27)	2.96 _c (1.16)
Autonomy	2.50 _a (1.16)	2.88 _b (0.96)	2.76 _b (1.20)	3.30 _c (1.03)
Divinity	2.02 _a (1.07)	1.92 _b (1.10)	2.86 _c (1.09)	2.38 _d (1.17)

Note. Subscripts that differ within each row are significantly different, $p < .05$. Standard deviations are in parentheses.

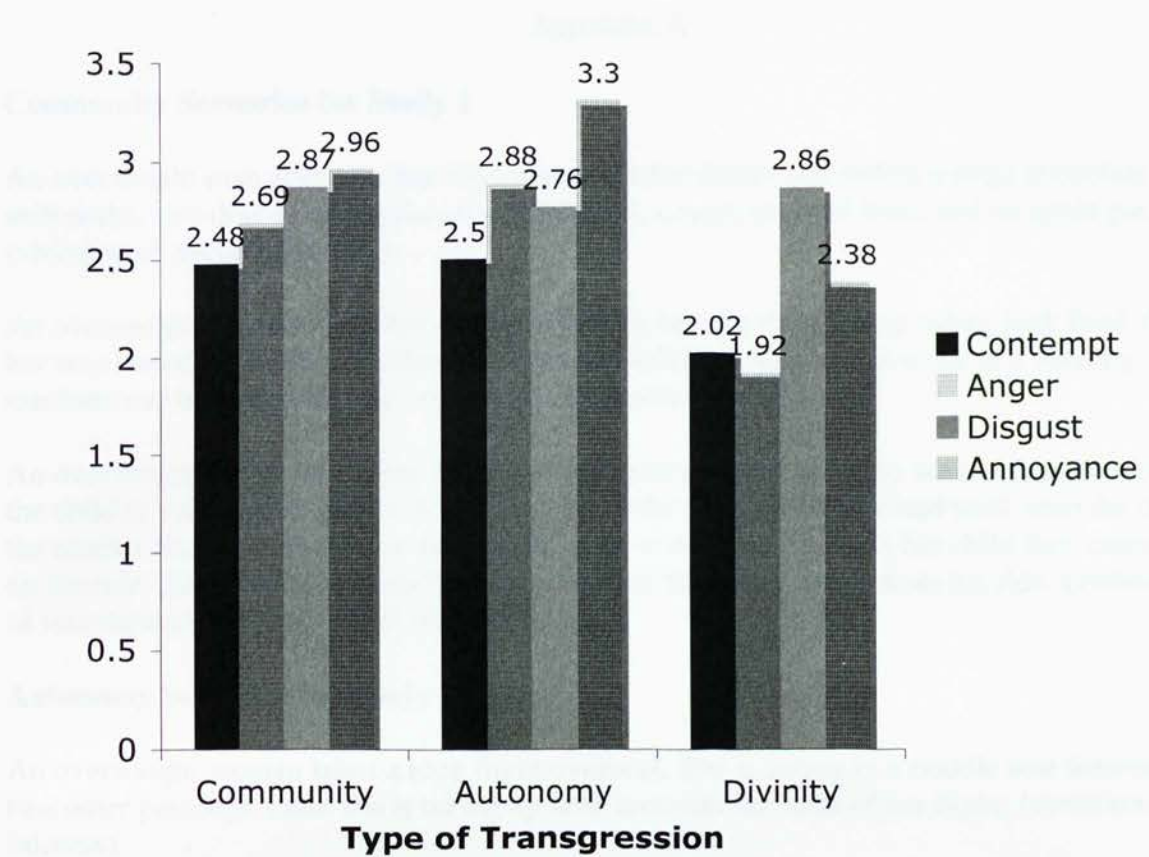


Figure 1. CAD triad emotions as experienced following each type of CAD triad transgression. The extent to which each emotion was experienced was rated on a scale from 1 (*not at all*) to 5 (*very much*). Means are represented above each bar.

Appendix A

Community Scenarios for Study 1

An overweight man goes to a fast food restaurant for dinner and orders a large chocolate milkshake, two double cheeseburgers with bacon, a large order of fries, and an apple pie. (violation of social hierarchy)

An overweight woman visits her doctor, who tells her she should stop eating junk food. On her way out of the medical facility after her appointment, the woman stops at a vending machine and buys a candy bar. (violation of respect for authority)

An overweight mother takes her child to an amusement park and they wait in line for a ride the child is very excited about. When they get to the front of the line and walk onto the ride, the mother finds that she is too overweight to fit in the seat. She tells her child they cannot go on the ride. The child is extremely disappointed as they walk away from the ride. (violation of interdependence, role-based obligation)

Autonomy Scenarios for Study 1

An overweight woman takes a long flight overseas. She is sitting in a middle seat between two other passengers and she is taking up both armrests for most of the flight. (violation of fairness)

An overweight man attends a kickboxing class. After about 15 minutes of the workout, it is clear he cannot keep up, so he interrupts the workout and asks the instructor to slow down the pace of the entire class. (violation of fairness)

An overweight woman leaves a candle burning near a curtain. The curtain catches on fire and the fire quickly spreads to the rest of her house. She falls unconscious from the smoke. The fire department arrives and a firefighter carries the overweight woman out of the burning building. Because she weighs so much, the firefighter injures his back carrying the woman to safety. (violation of harm to others)

Divinity Scenarios for Study 1

An overweight woman is given a day off from work. She spends the better part of her day sitting on her couch in front of the television. (violation of laziness)

An overweight man has a large unopened bag of potato chips leftover after hosting a party. He opens the bag and sits down to eat a few chips, but quickly ends up eating every chip in the bag. (violation of weak will, control)

An overweight woman walks to a crowded beach, sits down in the sand, and takes off her clothes to reveal a skimpy bathing suit that covers very little of her body. (violation of excess)

Appendix B

Community Scenarios for Study 2

Imagine you overhear an overweight woman's doctor tell her not to eat any junk food. On her way out of the medical facility after her appointment, you see the overweight woman stop at a vending machine and buy two candy bars and a bag of chips. (violation of respect for authority)

Imagine you see an overweight mother standing in line with her child for a ride at an amusement park. The child is very excited about the ride. When they get to the front of the line and walk onto the ride, you watch as the mother finds that she is too overweight to fit in the seat. You hear her tell her child they cannot go on the ride and see that the child is extremely disappointed. (violation of interdependence, role-based obligation)

Imagine you arrive for a date you made through an online dating service to find out that your date, who previously described himself as being of average weight, is actually quite overweight. (violation of group honor)

Autonomy Scenarios for Study 2

Imagine you are uncomfortable on a long flight overseas because there is an overweight woman sitting next to you, taking up the whole armrest between you and her for most of the flight. (violation of fairness)

Imagine you have to pay more for health insurance because there are a lot of overweight people with health problems on your health plan. (violation of fairness)

Imagine you read an article about an overweight woman who was sleeping when her house caught on fire. The fire spread quickly and she fell unconscious from the smoke. The fire department arrived and a firefighter carried the overweight woman out of the burning building. You also read that because she weighed so much, the firefighter sustained a serious back injury while carrying the woman to safety. (violation of harm to others)

Divinity Scenarios for Study 2

Imagine you see a button pop off of an overweight woman's shirt. (violation of excess)

Imagine you watch an overweight man eat an entire bag of chips in one sitting. (violation of weak will, control)

Imagine you are sitting on a crowded beach and see an overweight woman walking around wearing a skimpy bathing suit that covers very little of her body. (violation of excess)