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# Benign Violations: Making Immoral Behavior Funny

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## Abstract

Humor is an important, ubiquitous phenomenon; however, seemingly disparate conditions seem to facilitate humor. We integrate these conditions by suggesting that laughter and amusement result from violations that are simultaneously seen as benign. We investigated three conditions that make a violation benign and thus humorous: (a) the presence of an alternative norm suggesting that the situation is acceptable, (b) weak commitment to the violated norm, and (c) psychological distance from the violation. We tested the benign-violation hypothesis in the domain of moral psychology, where there is a strong documented association between moral violations and negative emotions, particularly disgust. Five experimental studies show that benign moral violations tend to elicit laughter and amusement in addition to disgust. Furthermore, seeing a violation as both wrong and not wrong mediates behavioral displays of humor. Our account is consistent with evolutionary accounts of laughter, explains humor across many domains, and suggests that humor can accompany negative emotion.

## Keywords

humor, moral violations, moral judgment, emotion, mixed emotions, disgust, laughter

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Theories of humor often suggest that humor requires a perceived violation, or something that disrupts people's sense of how the world ought to be (Freud, 1928; Gruner, 1997; Veatch, 1998). Moral psychology theories, however, typically suggest that the very same types of normative breaches elicit negative emotions, such as disgust, rather than amusement (Rozin, Lowery, Imada, & Haidt, 1999). We hypothesize that humor is elicited by benign violations and show that moral violations that simultaneously seem benign elicit laughter and amusement in addition to disgust.

## Humor Is Important

Humor is a psychological state characterized by the positive emotion of amusement and the tendency to laugh (Gervais & Wilson, 2005; Martin, 2007; Veatch, 1998). Understanding humor is important to psychological science. Humor is ubiquitous. People of all ages and cultures experience humor in their daily conversation, observation, and imagination (Apte, 1985; Wyer & Collins, 1992). The pursuit of humor affects people's entertainment choices and whom they select as friends, dates, and mates (Martin, 2007; Provine, 2000). Humor also bestows social, psychological, and physical benefits. It attracts attention and admiration, softens criticism, delineates social boundaries, and alleviates conflict between people with different

worldviews (Gervais & Wilson, 2005; Keltner, Capps, Kring, Young, & Heerey, 2001; Martin, 2007). Humor even helps people cope with anxiety, embarrassment, grief, and physical pain (Gervais & Wilson, 2005; Keltner & Bonanno, 1997; Martin, 2007).

## Theories of Humor

Since the dawn of Western thought, philosophers, scientists, and comedians have tried to explain what makes things funny. Theories of humor, however, tend to suffer from one of two drawbacks. Domain-specific theories, which address narrow sources of humor, such as jokes (Raskin, 1985) or irony (Giora, 1995), are incapable of explaining humor across domains. And general humor theories, which attempt to explain all types of humor by supposing broad antecedents, such as incongruity (Suls, 1972), superiority (Gruner, 1997), or tension release (Freud, 1928), often erroneously predict humor, as in the case of some unexpected tragedies. For example, unintentionally killing a loved one would be incongruous, assert superiority,

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and release repressed aggressive tension, but is unlikely to be funny. Moreover, most humor theories have difficulty predicting laughter in response to tickling or play fighting in primates (including humans). Consequently, evolutionarily primitive sources of laughter, such as tickling and play fighting (Gervais & Wilson, 2005), are typically treated as distinct from other sources of humor (Provine, 2000; Wyer & Collins, 1992).

Although existing theories do not agree on the specific necessary and sufficient antecedents of humor (Martin, 2007), a broad review of the literature suggests three conditions that facilitate humor. First, theorists since Aristotle have suggested that humor is often evoked by violations, including apparent threats, breaches of norms, or taboo content (Freud, 1928; Gruner, 1997; Provine, 2000; Veatch, 1998). Empirical work confirms that humor is aroused by displays of aggression, hostility, and disparagement (McCauley, Woods, Coolidge, & Kulick, 1983; Zillmann, 1983). For example, primates often laugh when they are play fighting, tickled, or in the presence of other physical threats (Gervais & Wilson, 2005; Provine, 2000).

A second, seemingly contradictory, condition is that humor occurs in contexts perceived to be safe, playful, nonserious, or, in other words, benign (Apter, 1982; Gervais & Wilson, 2005; Ramachandran, 1998; Rothbart, 1973). For example, apparent threats like play fighting and tickling are unlikely to elicit laughter if the aggressor seems serious or is not trusted (Gervais & Wilson, 2005; Rothbart, 1973).

A third condition provides a way to reconcile the first two: Several theories suggest that humor requires an interpretive process labeled simultaneity, bisociation, synergy, or incongruity (Apter, 1982; Koestler, 1964; Raskin, 1985; Veatch, 1998; Wyer & Collins, 1992). That is, humor requires that two contradictory ideas about the same situation be held simultaneously. For example, understanding puns, in which two meanings of a word or phrase are brought together, requires simultaneity (Martin, 2007; Veatch, 1998). Simultaneity, moreover, provides a way to interpret the threats present in play fighting and tickling as benign.

## The Benign-Violation Hypothesis

With the exception of Veatch (1998), researchers have not considered these three conditions together. Considered together, however, they suggest an untested hypothesis: Humor is aroused by benign violations. The benign-violation hypothesis suggests that three conditions are jointly necessary and sufficient for eliciting humor: A situation must be appraised as a violation, a situation must be appraised as benign, and these two appraisals must occur simultaneously.

Violations can take a variety of forms (Veatch, 1998). From an evolutionary perspective, humorous violations likely originated as apparent physical threats, similar to those present in play fighting and tickling (Gervais & Wilson, 2005). As humans evolved, the situations that elicited humor likely expanded from apparent physical threats to a wider range of violations, including violations of personal dignity (e.g.,

slapstick, physical deformities), linguistic norms (e.g., unusual accents, malapropisms), social norms (e.g., eating from a sterile bedpan, strange behaviors), and even moral norms (e.g., bestiality, disrespectful behaviors). The benign-violation hypothesis suggests that anything that is threatening to one's sense of how the world "ought to be" will be humorous, as long as the threatening situation also seems benign.

Just as there is more than one way in which a situation can be a violation, there is more than one way in which a violation can seem benign. We propose and test three. A violation can seem benign if (a) a salient norm suggests that something is wrong but another salient norm suggests that it is acceptable, (b) one is only weakly committed to the violated norm, or (c) the violation is psychologically distant.

## Benign Moral Violations

We tested the benign-violation hypothesis by examining reactions to moral violations, or behaviors people consider wrong. Moral violations provide a compelling test because the moral psychology literature suggests that moral violations elicit strictly negative emotion (McGraw & Tetlock, 2005; Rozin et al., 1999), notably disgust (Rozin, Haidt, & McCauley, 2000). Consider the following scenario adapted from Haidt, Koller, and Dias (1993):

A man goes to the supermarket once a week and buys a dead chicken. But before cooking the chicken, he has sexual intercourse with it. Then he cooks the chicken and eats it.

Using a chicken carcass for masturbatory purposes violates widely held moral norms concerning bestiality and necrophilia. Consequently, most people are disgusted by this behavior and consider it wrong (Haidt et al., 1993). However, for several reasons, the behavior can simultaneously seem benign and thus be amusing. First, it is harmless—after all, the chicken was already dead—and therefore acceptable according to a moral norm based on harm (Haidt et al., 1993). Second, as unlikely as it may seem, some people may not be strongly committed to the violated sexual norms (Haidt & Hersh, 2001). Third, the scenario seems hypothetical and thus psychologically distant. The benign-violation hypothesis predicts that people who see the behavior as both a violation and benign will be amused. Those who do not simultaneously see both interpretations will not be amused.

In five experimental studies, we explored whether benign moral violations are more humorous than similar situations that either do not involve a moral violation (Studies 1, 2, 4, and 5) or involve a moral violation that is not benign (Studies 3–5). Our first two studies show that potentially benign moral violations tend to elicit laughter and behavioral displays of amusement. The latter three studies show that benign moral violations elicit mixed emotions of amusement and disgust, whereas moral violations that are not benign (i.e., malign violations) tend to elicit strictly negative emotion.

## Moral Violations Can Be Funny

### Study 1: benign moral violations elicit laughter

Our first study investigated whether moral violations that can be seen as benign are more likely to elicit laughter than are behaviors that do not violate a moral norm.

**Design and measures.** Sixty-six people (42% female, 58% male) approached on a large university campus agreed to complete Study 1 in exchange for a candy bar. Participants read a violation version and a control version of four different scenarios (see Table 1). The violation versions described behaviors that breach a widely recognized moral norm, but are unusual enough to seem hypothetical and, therefore, psychologically distant. Moreover, although these behaviors violate a moral norm, they may be considered acceptable according to an alternative norm. For example, in the Snorting Remains scenario, a man disrespects his dead father by snorting his ashes. However, technically, the behavior honors the wishes of the deceased: The father told his son to do “whatever he

wished with the remains.” In the control version, there is no violation: The son buries his father’s ashes.

After reading each version of each scenario, participants were asked two questions: “Is the behavior described in this scenario *wrong* (i.e., immoral)?” and “Did this scenario make you laugh?” Participants responded “yes” or “no” to each question.

The experiment used a 2 (version: violation, control)  $\times$  2 (version order: violation first, control first)  $\times$  4 (scenario order) mixed design. Version was manipulated within subjects, and the two order factors were manipulated between subjects. Analyses showed no significant effects of gender or order ( $ps > .10$ ), so these variables are not discussed further.<sup>1</sup>

**Results.** Participants were more likely to judge the behavior in the violation versions wrong than to judge the behavior in the control versions wrong (69% vs. 2%),  $F(1, 58) = 576.5$ ,  $p < .001$ . They were also more likely to report laughter in response to violation versions than in response to control versions (44% vs. 5%),  $F(1, 58) = 112.4$ ,  $p < .001$ , a pattern consistent

**Table 1.** Scenarios and Results From Study 1

Scenario and version	Response (%)		
	“Behavior is wrong”	“Behavior made me laugh”	Both
<b>Snorting Remains</b>			
Violation version: Before he passed away, Keith’s father told his son to cremate his body. Then he told Keith to do whatever he wished with the remains. Keith decided to <b>snort</b> his dead father’s ashes.	82	38	29
Control version: Before he passed away, Keith’s father told his son to cremate his body. Then he told Keith to do whatever he wished with the remains. Keith decided to <b>bury</b> his dead father’s ashes.	6	5	0
<b>Selling Virginity</b>			
Violation version: Jenny’s family made some poor investments. Then her father lost his job. She wanted to help out, and so she decided to sell her <b>virginity</b> on eBay® to earn money to help pay off family debt.	78	45	35
Control version: Jenny’s family made some poor investments. Then her father lost his job. She wanted to help out, and so she decided to sell her <b>jewelry</b> on eBay® to earn money to help pay off family debt.	2	2	0
<b>Stealing Tips</b>			
Violation version: The servers and bartenders at a wedding <b>are denied</b> tips when the mother of the bride walks up to the bar and casually <b>pockets the money</b> in the tip jar.	94	32	29
Control version: The servers and bartenders at a wedding <b>earn extra</b> tips when the mother of the bride walks up to the bar and casually <b>drops a ten-dollar bill</b> in the tip jar.	0	3	0
<b>Endorsing Pork</b>			
Violation version: Jimmy Dean decides to hire a <b>rabbi</b> as their new spokesperson for the company’s line of pork products.	21	62	12
Control version: Jimmy Dean decides to hire a <b>farmer</b> as their new spokesperson for the company’s line of pork products.	0	12	0
<b>Average</b>			
Violation version	69	44	27
Control version	2	5	0

Note: Boldface highlights the words that differed between versions.

with the benign-violation hypothesis. A significant percentage of participants who considered the behavior in the violation versions wrong also reported laughing at the behavior (27% vs. 0%),  $F(1, 58) = 60.7, p < .001$  (see Table 1 for results).

### Study 2: funny violations seem “wrong” and “not wrong”

Next, we explored whether people who interpret a situation as both a violation and benign are more likely to smile and laugh than those who do not. One way a violation can be benign is if it seems wrong according to one norm, but acceptable according to another norm. Therefore, to test the simultaneity condition of the benign-violation hypothesis, we asked participants exposed to either the violation version or the control version of a scenario if they could interpret the behavior in the scenario as both “wrong” and “not wrong.”

**Design and measures.** People were approached by a research assistant on a large university campus and asked if they were willing to participate in a brief research study. Those who consented ( $N = 73$ ) were given an envelope and instructed to read a brief scenario inside. Depending on random assignment, the scenario described a man who snorts (violation) or buries (control) his dead father’s ashes (see Snorting Remains in Table 1). While the participant read the scenario, a research assistant, blind to both the participant’s condition and the experiment’s hypotheses, observed whether or not the participant smiled and laughed. Participants who smiled or laughed were coded as displaying amusement.

After reading the scenario, participants read the following instructions:

People can interpret situations in a variety of ways. Some people may think that a situation is wrong, while others think that it is okay. Sometimes, however, the same person may be able to see how a situation can be interpreted as both wrong and okay. We want to know whether you see the behavior in the above scenario as wrong, not wrong, or both wrong and not wrong.

Participants then responded “yes” or “no” to each of two questions: “Can you interpret the behavior in this scenario as wrong (i.e., immoral)?” and “Can you interpret the behavior in this scenario as not wrong (i.e., okay)?”

**Results.** Results were consistent with those of the initial study. Participants were more likely to show signs of amusement while reading the violation version about a son snorting his father’s ashes than while reading the control version about a son burying his father’s ashes (32% vs. 8%),  $\chi^2(1, N = 73) = 6.5, p = .01$ . Interestingly, participants who interpreted the behavior as both wrong and not wrong were significantly more likely to show signs of amusement than participants who interpreted the behavior as strictly wrong or strictly not wrong

(44% vs. 13%),  $\chi^2(1, N = 73) = 8.5, p < .01$ . A mediation test indicated that the interpretation of the behavior as both wrong and not wrong partially mediated the effect of scenario version on displays of amusement, Sobel  $t = 2.1, p < .05$  (Baron & Kenny, 1986).

### Mixed Emotions and Benign Violations

Theorists typically describe humor as a strictly positive emotional experience (Gervais & Wilson, 2005; Martin, 2007; Veatch, 1998). However, the benign-violation hypothesis posits that a violation is a necessary condition for humor, and violations typically elicit negative emotion (Nesse, 1990; Rozin et al., 1999). Moreover, simultaneity, another necessary condition for humor according to the benign-violation hypothesis, is conducive to mixed emotions (Larsen, McGraw, Mellers, & Cacioppo, 2004). Thus, we suspect that some humorous situations may arouse negative emotion in addition to amusement and laughter. A similar idea was initially suggested by Plato (trans. 1975), who believed that humor involves a mixture of pleasure and pain, and recent research has confirmed that some humorous experiences, such as tickling and toilet humor, involve mixed emotions (Harris & Alvarado, 2005; Hemenover & Schimmack, 2007). Our subsequent studies tested whether benign moral violations elicit mixed emotions of amusement and disgust. The studies also investigated conditions that make violations simultaneously seem benign.

### Study 3: conflicting norm interpretations

One way in which a violation may seem benign is if one norm suggests that the behavior is wrong but another simultaneously suggests that it is acceptable. Consider the scenario developed by Schnall, Haidt, Clore, and Jordan (2008), in which a man rubs his bare genitals on his pet kitten. In the original scenario, the kitten “purrs and seems to enjoy the contact” (p. 1108). The protagonist violates a moral norm related to bestiality by using his pet kitten as a sex toy. However, because no one is harmed—note that the kitten seems to enjoy the contact—the behavior is acceptable according to an alternative norm based on harm (Haidt, 2007). Consequently, we suspect that many people will see the behavior in this scenario as a benign violation and be amused. But what if the kitten is harmed by the behavior? Suppose that instead of purring, the kitten “whines and does not seem to enjoy the contact.” In this case, the behavior is wrong according to both norms. We suspect that this violation will seem less benign and, consequently, less amusing. Study 3 tested this hypothesis.

**Design and measures.** Thirty-six undergraduates (42% female, 58% male) completed the experiment in exchange for partial course credit. Participants were randomly assigned to read one of two versions (harmful, harmless) of a scenario in which a man rubs his genitals on a kitten (see Table 2). Participants



reported their reaction to the scenario on a series of dichotomous yes/no measures, as recommended in the literature on mixed emotions (Larsen, McGraw, & Cacioppo, 2001; Russell & Carroll, 1999). Specifically, participants indicated whether or not they were amused, were disgusted, and thought the behavior was wrong.

**Results.** Most participants judged the behavior in the scenario to be wrong (72%) and disgusting (94%) regardless of condition; however, participants were more amused by the harmless version than by the harmful version (61% vs. 28%),  $\chi^2(1, N = 36) = 4.1, p < .05$ . Moreover, amusement typically supplemented, rather than replaced, feelings of disgust. Consequently, participants were more likely to report being both amused and disgusted when the behavior was harmless than when it was harmful (56% vs. 22%),  $\chi^2(1, N = 36) = 4.2, p < .05$  (see Table 3 for results).

#### Study 4: commitment to the violated norm

Another way a violation may seem benign is if a situation violates a norm to which people are only weakly committed (Veatch, 1998). People who are more weakly committed to a norm can recognize the violation but are less likely to be threatened or to directly experience the violation's repercussions. Consider a news story about a church that raffles off a Hummer SUV as part of a promotion for its members (Graham, 2005). Engaging in such a secular promotion jeopardizes the sanctity of the church, and, although most people consider churches sacred, churchgoers should be more strongly committed to this belief than are people who do not attend church (McGraw, Schwartz, & Tetlock, 2010). Consequently, we

expected that nonchurchgoers would be more amused and would experience more mixed emotions than churchgoers when reading about a church that raffles off an SUV as part of a promotion.

**Design and measures.** Eighty undergraduate participants (55% female, 45% male) completed Study 4 for partial course credit. Participants were randomly assigned to read either a violation version or a control version of a scenario in which a church (violation) or a credit union (control) raffles off an H2 Hummer SUV as part of a promotion (see Table 2). Participants indicated whether or not they were amused and disgusted, responding "yes" or "no." Next, we asked whether or not participants attended church (our proxy for commitment). Participants who attended church were coded as strongly committed, and participants who never attended church were coded as weakly committed to the sanctity of the church. Crossing the manipulation with the individual difference in commitment yielded a 2 (version: violation, control)  $\times$  2 (commitment: high, low) between-subjects design.

**Results.** Both nonchurchgoers and churchgoers were disgusted by the violation, a church giving away an SUV (69% vs. 65%),  $\chi^2(1, N = 39) = 0.06, p > .8$ . However, nonchurchgoers, who were less committed to the violated norm, were more likely to be amused than churchgoers (92% vs. 62%),  $\chi^2(1, N = 39) = 4.1, p < .05$ . Nonchurchgoers were also more likely than churchgoers to be both amused and disgusted (69% vs. 35%),  $\chi^2(1, N = 39) = 4.2, p < .05$ . As expected, we found no differences between churchgoers and nonchurchgoers in the control condition, in which a credit union gave away an SUV ( $ps > .1$ ; see Table 4 for results).<sup>2</sup>

**Table 2.** Scenarios for Studies 3, 4, and 5

Study and scenario	Harmless or control version	Harmful or violation version
Study 3: Kitten (adapted from Schnall, Haidt, Clore, & Jordan, 2008)	Matthew is playing with his new kitten late one night. He is wearing only his boxer shorts, and the kitten sometimes walks over his genitals. Eventually, this arouses him, and he begins to rub his bare genitals along the kitten's body. <b>The kitten purrs, and seems to enjoy the contact.</b>	Matthew is playing with his new kitten late one night. He is wearing only his boxer shorts, and the kitten sometimes walks over his genitals. Eventually, this arouses him, and he begins to rub his bare genitals along the kitten's body. <b>The kitten whines, and does not seem to enjoy the contact.</b>
Study 4: Hummer (adapted from Graham, 2005)	In order to recruit new members, a <b>credit union</b> is raffling off a new H2 Hummer SUV. Anyone who joins the <b>credit union</b> in the next six months will be eligible to enter and win the H2.	In order to recruit new members, a <b>church</b> is raffling off a new H2 Hummer SUV. Anyone who joins the <b>church</b> in the next six months will be eligible to enter and win the H2.
Study 5: Chicken (adapted from Haidt, Koller, & Dias, 1993)	A man goes to the supermarket once a week and buys a chicken. But before cooking the chicken, he <b>marinates</b> it. Then he cooks the chicken and eats it.	A man goes to the supermarket once a week and buys a chicken. But before cooking the chicken, he <b>has sexual intercourse with</b> it. Then he cooks the chicken and eats it.

Note: Boldface highlights the words that differed between versions.

**Table 3.** Results for Study 3

Response to scenario	Version		$\chi^2$ test
	Harmless	Harmful	
Behavior is wrong	72	72	—
Disgusted	94	94	—
Amused	61	28	$\chi^2(1, N = 36) = 4.1, p < .05$
Both disgusted and amused	56	22	$\chi^2(1, N = 36) = 4.2, p < .05$
Disgusted only	39	72	$\chi^2(1, N = 36) = 4.1, p < .05$
Amused only	6	6	—
Neither disgusted nor amused	0	0	—

Note: The table indicates the percentage of participants who reported each response.

### Study 5: psychological distance from the violation

Psychological distance in its many forms—temporal, social, spatial, likelihood, or hypotheticality (Liberman & Trope, 2008)—may also make a violation seem more or less benign (Williams & Bargh, 2008). Comedians have long speculated that increasing psychological distance helps transform negative experiences into amusing ones. Carol Burnett highlighted the role of temporal distance, stating, “Comedy is tragedy plus time” (Wikiquote, 2010). Mel Brooks focused instead on social distance in his famous quip, “Tragedy is when I cut my finger. Comedy is when you walk into an open sewer and die” (Wikiquote, 2010). Indeed, increasing psychological distance reduces the threat associated with aversive events (Williams & Bargh, 2008) and induces mixed emotional responses to physically disgusting and frightening stimuli (Andrade & Cohen, 2007; Hemenover & Schimmack, 2007).

Because increasing psychological distance should make violations seem more benign, we hypothesized that psychologically distant moral violations would elicit more amusement than psychologically near violations. In Study 5, we used a priming procedure to activate far or near psychological distance. After this procedure, participants were randomly exposed to a moral violation or a similar control scenario.

**Design and procedure.** Seventy-three undergraduate participants (34% female, 66% male) at a large university completed this experiment for partial course credit. Participants were randomly assigned to one of four conditions in a 2 (version: violation, control)  $\times$  2 (psychological distance: far, near) between-subjects design.

First, participants were asked to plot two points on a Cartesian coordinate plane, ostensibly to help develop a new standardized test question. Participants in the far condition plotted

**Table 4.** Results for Study 4

Response	Violation version				Control version				$\chi^2$ test (violation vs. control)
	Low com- mitment	High com- mitment	Total	$\chi^2$ test (low vs. high commitment)	Low com- mitment	High com- mitment	Total	$\chi^2$ test (low vs. high commitment)	
Disgusted	69	65	67	$\chi^2(1, N = 39) = 0.06, p < .81$	0	28	22	$\chi^2(1, N = 41) = 3.2, p < .17^a$	$\chi^2(1, N = 80) = 16.2, p < .001$
Amused	92	62	72	$\chi^2(1, N = 39) = 4.1, p < .05$	44	59	56	$\chi^2(1, N = 41) = 0.64, p < .42$	$\chi^2(1, N = 80) = 2.1, p < .14$
Both disgusted and amused	69	35	46	$\chi^2(1, N = 39) = 4.2, p < .05$	0	16	12	$\chi^2(1, N = 41) = 1.6, p < .57^a$	$\chi^2(1, N = 80) = 11.3, p < .001$
Disgusted only	0	31	21	$\chi^2(1, N = 39) = 5.0, p < .04^a$	0	12	10	$\chi^2(1, N = 41) = 1.2, p < .56^a$	$\chi^2(1, N = 80) = 1.8, p < .18$
Amused only	23	27	26	$\chi^2(1, N = 39) = 0.07, p < .80$	44	44	44	$\chi^2(1, N = 41) = 0.00, p < .98$	$\chi^2(1, N = 80) = 2.9, p < .09$
Neither disgusted nor amused	8	8	8	—	56	28	34	$\chi^2(1, N = 41) = 2.4, p < .13$	$\chi^2(1, N = 80) = 8.4, p < .01$

Note: The table indicates the percentage of participants who reported each response.

<sup>a</sup>These  $p$  values were calculated using Fisher's exact test.

**Table 5.** Results for Study 5

Response	Violation version				Control version				
	Far condition	Near condition	Total	$\chi^2$ test (far vs. near condition)	Far condition	Near condition	Total	$\chi^2$ test (far vs. near condition)	$\chi^2$ test (violation vs. control)
Disgusted	86	83	85	$\chi^2(1, N = 40) = 0.03$ , $p < 1.0^a$	0	6	3	$\chi^2(1, N = 32) = 0.01$ , $p < 1.0^a$	$\chi^2(1, N = 72) = 48.7$ , $p < .001$
Amused	73	39	58	$\chi^2(1, N = 40) = 4.6$ , $p < .03$	7	11	9	$\chi^2(1, N = 32) = 0.05$ , $p < 1.0^a$	$\chi^2(1, N = 72) = 17.8$ , $p < .001$
Both disgusted and amused	64	28	47	$\chi^2(1, N = 40) = 5.1$ , $p < .02$	0	0	0	—	$\chi^2(1, N = 72) = 21.2$ , $p < .001$
Disgusted only	23	56	38	$\chi^2(1, N = 40) = 4.6$ , $p < .03$	0	6	3	$\chi^2(1, N = 32) = 0.01$ , $p < 1.0^a$	$\chi^2(1, N = 72) = 12.6$ , $p < .001$
Amused only	9	11	10	$\chi^2(1, N = 40) = 0.10$ , $p < 1.0^a$	7	11	9	$\chi^2(1, N = 32) = 0.05$ , $p < 1.0^a$	$\chi^2(1, N = 72) = 0.01$ , $p < 1.0^a$
Neither disgusted nor amused	5	6	5	$\chi^2(1, N = 40) = 0.34$ , $p < 1.0^a$	93	83	88	$\chi^2(1, N = 32) = 0.07$ , $p < .61^a$	$\chi^2(1, N = 72) = 49.8$ , $p < .001$

Note: The table indicates the percentage of participants who reported each response.

<sup>a</sup>These  $p$  values were calculated using Fisher's exact test.

points, (12, 10) and (−11, −8), approximately 16 cm apart on the coordinate plane. Participants in the near condition plotted points, (2, 4) and (−3, −1), approximately 4 cm apart on the coordinate plane (Williams & Bargh, 2008). After completing the distance prime, participants read one of two versions of a scenario adapted from Haidt et al. (1993) as part of an ostensibly unrelated experiment. Participants read about a man either having sexual intercourse with (violation) or marinating (control) a chicken before cooking and eating it (see Table 2). They indicated whether or not they were amused and whether or not they were disgusted, responding “yes” or “no” to each question.

**Results.** Most participants responded with disgust to the violation, a man having sexual intercourse with a chicken, irrespective of whether they were primed with far or near distance (86% vs. 83%),  $\chi^2(1, N = 40) = 0.07$ ,  $p > .7$ . However, participants primed to feel psychologically far from the violation were more amused than those primed to feel psychologically near the violation (73% vs. 39%),  $\chi^2(1, N = 40) = 4.6$ ,  $p < .05$ . They also were more likely to report being both amused and disgusted (64% vs. 28%),  $\chi^2(1, N = 40) = 5.1$ ,  $p < .05$ . Participants responded to the control scenario, a man marinating a chicken, with very little emotion, and these responses did not differ as a function of psychological distance ( $ps > .3$ ; see Table 5 for results).

## Discussion

We found that benign moral violations tend to elicit laughter (Study 1), behavioral displays of amusement (Study 2), and mixed emotions of amusement and disgust (Studies 3–5). Moral

violations are amusing when another norm suggests that the behavior is acceptable (Studies 2 and 3), when one is weakly committed to the violated norm (Study 4), or when one feels psychologically distant from the violation (Study 5). These findings contribute to current understanding of humor by providing empirical support for the benign-violation hypothesis and by showing that negative emotions can accompany laughter and amusement. The findings also contribute to understanding of moral psychology by showing that benign moral violations elicit laughter and amusement in addition to disgust.

We investigated the benign-violation hypothesis in the domain of moral violations. The hypothesis, however, appears to explain humor across a range of domains, including tickling, teasing, slapstick, and puns. As previously discussed, tickling, which often elicits laughter, is a benign violation because it is a mock attack (Gervais & Wilson, 2005; Koestler, 1964). Similarly, teasing, which is a playful, indirect method of provocation that threatens the dignity of a target (Keltner et al., 2001), appears to be consistent with the benign-violation hypothesis. Targets are more likely to be amused by teasing that is less direct (multiple possible interpretations), less relevant to the targets' self-concept (low commitment), and more exaggerated (greater hypotheticality or psychological distance; Keltner et al., 2001). Slapstick humor also involves benign violations because the harmful or demeaning acts are hypothetical and thus psychologically distant. Slapstick is less funny if it seems too real or if the viewer feels empathy for the victim. Humorous puns also appear to be benign violations. A pun is funny, at least to people who care about language, because it violates a language convention but is technically correct according to an alternative interpretation of a word or phrase (Veatch, 1998).



## Conclusion

Synthesizing seemingly disparate ideas into three jointly necessary and sufficient conditions (appraisal as a violation, appraisal as a benign situation, and simultaneity), we suggest that humor is a positive and adaptive response to benign violations. Humor provides a healthy and socially beneficial way to react to hypothetical threats, remote concerns, minor setbacks, social faux pas, cultural misunderstandings, and other benign violations people encounter on a regular basis. Humor also serves a valuable communicative function (Martin, 2007; Provine, 2000; Ramachandran, 1998): Laughter and amusement signal to the world that a violation is indeed okay.

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## Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

## Notes

1. Across the five studies, there was no consistent evidence for gender effects. When they were present, women tended to be less amused than men. This could have been due to stimulus selection or socially desirable responding. We leave this question to future research.
2. We suspect that the participants who were amused in the control condition were amused because the brand name, Hummer, also can be used as a euphemism for a sexual act, which created an unintended benign violation.

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