

“Do Unto Others”: Effects of Priming the Golden Rule on Buddhists’ and Christians’ Attitudes Toward Gay People

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The Golden Rule, a core precept of many religions, emphasizes the importance of treating others with compassion. We examined whether priming Golden Rule messages would influence Buddhists’ and Christians’ attitudes toward gay people and perceptions that homosexuality is a choice. In a priming task, participants filled in missing words for popular quotations including two Golden Rule messages that were attributed to either Buddha or Jesus. Christians (N = 585) in the Buddha-attributed Golden Rule condition showed stronger explicit anti-gay attitudes and were more likely to agree that homosexuality is a choice than Christians in the Jesus-attributed or control conditions, $\eta_p^2 = .012$, $p = .035$, even after controlling for political orientation and religiosity. Buddhists (N = 394) showed no variation in attitudes across priming conditions, $\eta_p^2 = .001$, $p = .78$. Our results suggest that although the Golden Rule has an important influence on believers, its message of compassion may produce more prejudice if it comes from an outgroup source compared to an ingroup source.

INTRODUCTION

“So in everything, do to others what you would have them do to you.” (Jesus, Matt. 7:12a, New Revised Standard Version)

“... hurt not others with what pains yourself.” (The Buddha, Udānavarga 5:18, trans. 1883:27).

These selected quotations illustrate the moral principle, known as the Golden Rule, that we ought to treat other people as we want to be treated (Wattles 1996). Golden Rule messages are common to many religions (Smith 1991; Terry 2007) and emphasize the importance of treating others fairly and being considerate. In practice, religious individuals are selective in its application; for example, religious individuals have more tolerant attitudes toward black people, but less tolerant attitudes toward gay people, than do nonreligious people (Duck and Hunsberger 1999; Herek 1987, Rowatt et al. 2009). In this research, we examined how priming the Golden Rule affected Christians’ and Buddhists’ attitudes toward gay people.

The Golden Rule

The Golden Rule is one of the universal moral values in major religions and is widely applied secularly (Kinnier, Kernes, and Dautheribes 2000; Smith 1991; Wattles 1996). It appears in Christianity, Buddhism, and secular philosophies (Wattles 1987, 1996). Whether framed negatively as an injunction against harm, or positively as a call for fair treatment, the Golden Rule exhorts

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individuals to take the perspective of other human beings into consideration for social judgment and action.

Religious Adherents and Prejudice

Past research on religion is equivocal about whether religious adherents follow the implications of the Golden Rule to a greater degree than nonreligious people (Allport and Ross 1967; Batson et al. 1999; Herek 1987; Rowatt et al. 2009). For example, religious people tend to express similar racial attitudes but stronger anti-gay attitudes than do nonreligious people (Rowatt et al. 2009; Whitley 2009). However, most of this research examined Christians, and not believers of other religions (Hansen and Norenzayan 2006). Recent research suggests that believers of different religions do express different attitudes toward gay people (Pew Forum on Religion & Public Life 2008). For example, among residents of Singapore, a religiously diverse society, Christians reported more negative attitudes toward gay people than did Buddhists (Detenber et al. 2007). One explanation for this difference may lie in prescribed teachings of Buddhism and Christianity on homosexuality. In Buddhism, no specific texts mention homosexuality, but one of the Five Precepts—Right Action (Samma Kammanta)—(Rahula 1974:47) emphasizes the importance of abstinence from sexual conduct that can be interpreted as either homosexual or heterosexual behavior. In contrast, the Bible contains some messages that condemn homosexual acts (Lev.18:22) and others that emphasize tolerance and loving one's neighbors (cf. Myers and Scanzoni 2005). Given these varying messages about tolerance, it makes sense that members of various Christian denominations differ in their attitudes toward gay people (Pew Forum 2008). Christians who perceive their religious groups to teach "love the sinner, hate the sin" self-report more tolerant attitudes toward gay people than those who perceive their religious groups as teaching otherwise (Veenvliet 2008).

Perhaps when religious individuals are primed with reminders of the Golden Rule by their religion's founder, they may prioritize tolerance and compassion for gay people. Research suggests that activating concepts, goals, or ideas, often known as priming, even without awareness, can influence behavior and attitudes (Bargh and Chartrand 2000). We examined whether a subtle reminder of the Golden Rule attributed to Jesus (Christianity) or the Buddha (Buddhism) was sufficient to alter Christians' and Buddhists' attitudes and beliefs about gay people.

Attitudes Toward Gay People

We measured attitudes with both self-report and implicit measures, which can reveal evaluative associations that are distinct from self-reported attitudes and beliefs (Greenwald and Banaji 1995). In a sample of more than 380,000 respondents, Nosek et al. (2007) found that most participants more easily associated gay people with bad and straight people with good than the reverse using the Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz 1998; Nosek, Greenwald, and Banaji 2007). Across participants, the correlation between the gay-straight IAT and self-reported attitudes was $r = .43$ (Nosek et al. 2007), reinforcing the observation that implicit and explicit attitudes are related, but distinct, constructs (Nosek and Smyth 2007). Various dimensions of religious personality have previously been found to be correlated with more negative implicit attitudes toward gay men relative to heterosexual men (Rowatt et al. 2006). Research suggests that both implicit and explicit attitudes can be influenced by priming, but perhaps under different circumstances (see Gawronski and Bodenhausen 2006 for a review).

Priming has been found to reduce negativity toward stigmatized social groups (Blanchard, Lilly, and Vaughn 1991; Dasgupta and Greenwald 2001). For example, priming participants with descriptions of well-known gay men and lesbians decreased participants' implicit anti-gay prejudice and increased explicit support for gay rights, regardless of their prior contact with gay people (Dasgupta and Rivera 2008); this manipulation directly primed positive exemplars

of gay people to influence attitudes about the category. We sought a more indirect means of affecting attitudes—priming general notions of tolerance that might influence attitudes toward a variety of social groups. Supporting this possibility, priming others' condemnation of prejudice can reduce racial prejudice. In one study, after hearing confederates verbally condemn a racist statement, participants were more likely to agree with harsh punishment for the person who made the racist statement (Blanchard, Lilly, and Vaughn 1991). Thus, we anticipated that priming a tolerant religious concept such as the Golden Rule could influence individuals' attitudes toward a religiously stigmatized group—gay people.

Source of Tolerance Message

Major religions, such as Buddhism (Udânavarga 5:18) and Christianity (Matt. 7:12a), contain Golden Rule messages that encourage their believers to show compassion for others by treating others in the same way that they themselves want to be treated. Buddhism and Christianity both follow their respective founder's teachings, the Buddha or Jesus Christ (Smith 1991), which offer principles of moral behavior that focus on loving all beings (Rahula 1974; Wattles 1996). Although other religions also contain the Golden Rule messages, this study focused on Buddhism and Christianity because of their similar doctrines on how to treat others.

Priming the Golden Rule as attributed to one's own religious founder could increase Buddhists' and Christians' tolerance toward gay people. Religious individuals perceive their religious founders as moral actors whose biographies exemplify generosity and compassion (Lopez 2004). We reasoned that the impact of the Golden Rule comes, in part, from its direct link to one's religious identity—that is, I am Christian and a follower of Jesus; Jesus taught the Golden Rule, therefore, I will follow the Golden Rule. This raises the question of how a person would respond if the message of tolerance came from a different religion. Research suggests that people are more defensive when they receive criticism from an outgroup member than from an ingroup member (see Hornsey 2005 for a review). Outgroup members may be particularly threatening when they criticize one's beliefs, perhaps especially so on moral matters. So, it is conceivable that a message of tolerance from an outgroup moral leader could have an ironic consequence of producing negativity toward gay people.

Additionally, the cultural context, such as the predominant religion of one's country, may influence the effect of priming the Golden Rule on attitudes toward gay people (Hunsberger, Owusu, and Duck 1999; Lieblich and Friedman 1985). For instance, even in religiously diverse cultures, practices of the predominant religion are widely reflected in society (Rowatt et al. 2009). Members of minority religions may have daily reminders that their religious beliefs are not the norm. As a consequence, they may be especially attuned to the challenges of minority status and therefore adopt a more tolerant perspective toward other minorities or stigmatized groups, even nonreligious groups (Lewis 2003).

Summary of Hypotheses

We examined how priming the Golden Rule affected Christians' and Buddhists' implicit and explicit attitudes toward gay people.¹ We hypothesized that priming the Golden Rule would activate its underlying message of empathy and compassion for others, affecting both Christians' and Buddhists' attitudes. We also hypothesized that priming the Golden Rule would reduce Christians' and Buddhists' negativity toward gay people. This should occur when the message

¹ In the article, we use gay people to succinctly characterize how participants perceive the group as a whole; implicit attitudes included equal numbers of stimuli for lesbians and gay men, but explicit attitudes (Herek and Capitanio 1995) request participants' attitudes toward gay people.

comes from one's own religious group (Jesus for Christians, Buddha for Buddhists), but may be ineffective, or even counterproductive, when it comes from an outgroup source. Finally, we examined whether Buddhists in predominantly Christian countries were more tolerant of gay people, perhaps because of greater sensitivity to the challenges of minority status.

METHOD

Participants

Volunteers who had reported a Buddhist or Christian religious affiliation during a signup at Project Implicit's research website (<http://implicit.harvard.edu>) were randomly assigned to this study from a pool of available studies. Seven hundred seventy-six Christians and 485 Buddhists ($M_{\text{age}} = 31$, range = 12–93) consented to participate, and 966 of those completed at least one of the measures. Participants were predominantly women (60 percent, $n = 757$; 3 = missing data). Among Buddhists, there were 329 citizens of predominantly Christian countries and 48 citizens of predominantly Buddhist countries (all classified using the World Factbook database; Central Intelligence Agency 2009). Most Christians ($n = 581$) were citizens of predominantly Christian countries and one Christian participant had citizenship in a predominantly Buddhist country.

Materials

Golden Rule Priming

Participants evaluated five paraphrased quotations by choosing the word that best completed each one, from four multiple-choice word options. Participants were randomly assigned to one of the three experimental conditions, two of which primed the Golden Rule by presenting variations of it as two of the five quotations. In the Buddha-attributed and Jesus-attributed Golden Rule conditions, the first and last paraphrased quotations presented the Golden Rule and were both attributed to the Buddha or Jesus, respectively (“Do unto others as you would have them do unto you” and “Never hatred is hatred appeased, but it is appeased by kindness”—Gautama Buddha/Jesus Christ, underlined words indicate the word that had to be identified by the participant). In the control condition, the first and last paraphrased quotations were not relevant to social groups and were of similar difficulty to complete (“Try to learn something about everything and everything about something. —T. H. Huxley” and “Not everything that can be counted counts and not everything that counts can be counted. —Albert Einstein”). For all three conditions, the middle three paraphrased quotations were the same (“All the world's a stage. —William Shakespeare,” “Imagination is more important than knowledge. —Albert Einstein,” and “If you come to a fork in the road, take it. —Yogi Berra”).

Explicit Attitude Measures

Participants reported their explicit attitudes toward gay people (adapted from Herek and Capitanio 1995) in a five-item questionnaire, using a six-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). The first three items assessed explicit dislike of homosexuality and gay people (“I think homosexual people are disgusting”; “Homosexual behavior between two gay people is just plain wrong”; “Homosexuality is a natural expression of sexuality in people,” reverse-scored). The final two items assessed their perceptions of the controllability of homosexuality (“Homosexuality is something people choose for themselves” and “Homosexuality is something over which people do not have any control,” reverse-scored).

Implicit Attitude Measure

The Sorting Paired Features (SPF) task (Bar-Anan, Nosek, and Vianello 2009) was used to measure implicit attitudes toward gay people and straight people. It measured association strengths between two group categories (gay people-straight people) and two evaluative categories (good-bad). In the SPF, participants categorize word pairs one at a time into one of the four categories (gay people+good, gay people+bad, straight people+good, straight people+bad) in three blocks of 40 trials. The pairs were composed of one item representing either gay people (e.g., an image of same-sex couples) or straight people (e.g., an image of opposite-sex couples) and one item representing either good (e.g., wonderful, fantastic) or bad (e.g., terrible, awful). Faster response times for categorizing stimuli from one category pair (e.g., gay-bad) compared to another (e.g., gay-good) was interpreted as indicating stronger associations for the former than the latter (i.e., implicit negativity toward gay people). Positive SPF scores indicate stronger associations between gay people and good than gay people and bad. The full study can be self-administered at <http://www.projectimplicit.net/nosek/papers/tln2010/>.

Covariates

Political orientation and religiosity were collected during registration, separate from the study. Self-ascribed political orientation was identified on a seven-point scale ranging from 3 (strongly liberal) to 3 (strongly conservative). Religiosity was reported on a four-point scale ranging from 1 (not at all) to 4 (very religious).²

Design and Procedure

After providing consent, Christian and Buddhist participants were randomly assigned to one of the three priming conditions (Buddha-attributed, Jesus-attributed, or control), in which they evaluated five paraphrased quotations. Participants then completed implicit and explicit measures of their attitudes toward gay people, with the measures' order being counterbalanced across participants.

RESULTS

Manipulation Checks

We removed data from participants who answered the two Golden Rule quotations incorrectly (26 Christians, 14 Buddhists) and those who answered one of the Golden Rule quotations correctly but answered all three neutral quotations incorrectly (e.g., below chance accuracy rate in choosing the best out of four options for the five quotations; 3 Christians, 2 Buddhists). We interpreted these patterns as indicating lack of attention or of motivation to follow instructions.

Analysis Strategy and Covariates

A general linear model (GLM) framework was used to test the hypotheses. Political orientation and religiosity served as covariates in the linear model and adjusted means are reported.

² Note that a one-item measure of religiosity does not capture nuance in religious orientation (Mavor and Gallois 2008) and ideology (fundamentalism; Rowatt et al. 2006), which may differentially relate to attitudes toward gay people. Such questions are beyond the scope of our article.

We used religiosity as a covariate, anticipating that priming the Golden Rule might be more effective for higher religiosity individuals. Also, politics was a covariate because previous research suggested political differences in attitudes toward gay people (Rowatt et al. 2009).

Differences Between Religious Believers

Religiosity and Political Orientation

Using an independent sample *t*-test, on average, Christians ($M = 2.49$, $SD = .87$) reported being more religious than Buddhists ($M = 2.29$, $SD = .88$), $t(1233) = 4.01$, $p < .0001$, $\eta_p^2 = .12^3$ and less politically liberal (Christians' $M = -.30$, $SD = 1.67$; Buddhists' $M = -1.49$, $SD = 1.45$), $t(1210) = 12.79$, $p < .0001$, $\eta_p^2 = .013$.

Attitudes Toward Gay People

Even after controlling for religiosity and political orientation, Christians (adj- $M = 2.44$) reported significantly more negative attitudes toward gay people than Buddhists did (adj- $M = 1.99$), $F(1,962) = 31.07$, $p < .0001$, $\eta_p^2 = .031$, but did not significantly differ in their perceptions of the controllability of homosexuality, $F(1,961) = .35$, $p = .55$, $\eta_p^2 = .000$, or in their implicit attitudes toward gay people, $F(1,709) = 2.05$, $p = .15$, $\eta_p^2 = .003$ (see the supplement at <http://www.projectimplicit.net/Papers/tln2010/> for the raw condition means for all results). No significant interaction between religious affiliation and priming condition was found for either explicit or implicit attitudes toward gay people (all $F_s \leq 2.70$, ns). Follow-up analysis indicated that the three-way interaction between religiosity, religion affiliation, and priming condition was also not significant for either explicit or implicit attitudes (all $F_s \leq 1.77$, ns).

Results for Christians

Overall, priming the Golden Rule significantly affected the explicit gay attitudes, $F(2, 580) = 3.38$, $p = .035$, $\eta_p^2 = .012$ and the perceived controllability of homosexuality, $F(2, 579) = 3.58$, $p = .029$, $\eta_p^2 = .012$, but did not affect implicit preferences for gay people, $F(2, 430) = .44$, $p = .65$, $\eta_p^2 = .002$. Subsequent analysis indicated that political orientation and religiosity did not qualify these results with significant two-way (all $F_s \leq .63$, ns) or three-way interactions (all $F_s \leq 1.52$, ns) between Golden Rule priming conditions and those covariates. The results of the GLM analyses are summarized in Table 1; excluding the covariates did not alter the substantive results.

Follow-up analysis indicated that Christians primed with Jesus-attributed Golden Rule messages (adj- $M = 2.53$) did not report significantly different gay attitudes from those in the control condition (adj- $M = 2.58$), $F(1, 580) = .14$, $p = .71$, $\eta_p^2 = .000$. However, Christians primed with Buddha-attributed Golden Rule messages (adj- $M = 2.84$) reported more negative attitudes toward gay people than did those in the control condition, $F(1,580) = 4.31$, $p = .038$, $\eta_p^2 = .007$, and Jesus-attributed condition, $F(1, 580) = 5.76$, $p = .017$, $\eta_p^2 = .010$ (see Figure 1).

Similarly, Christians (adj- $M = 3.48$) primed with Buddha-attributed Golden Rule messages perceived homosexuality as significantly more controllable than did those in the control condition,

³ Note that religiosity did not interact with the priming conditions on attitudes toward gay people for Buddhists or Christians. However, religiosity was associated with more negativity toward gay people for Christians, $r(600) = .36$, $p < .001$, but not for Buddhists, $r(389) = .031$, $p = .542$. One possible explanation is that meanings of religiosity may differ between Buddhists and Christians as it does between Jews and Christians (Cohen, Siegel, and Rozin 2003).

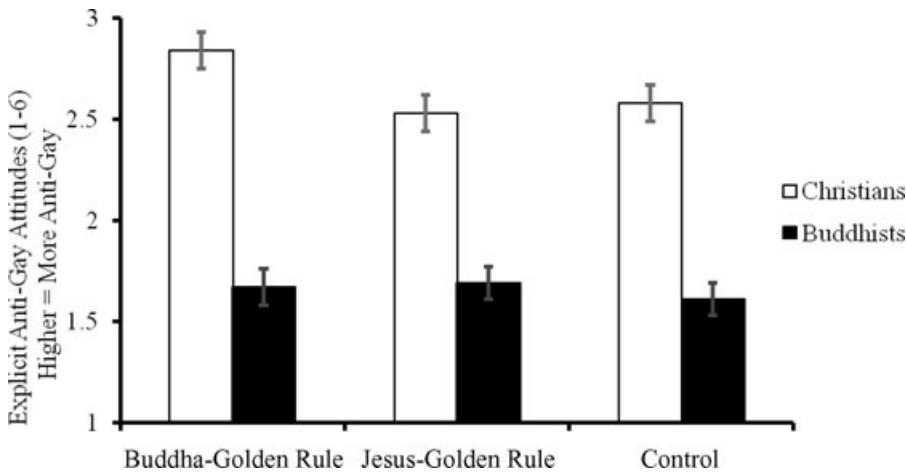
Table 1: Results of general linear model (GLM) analysis among Christians, predicting explicit and implicit attitudes toward gay people by the Golden Rule priming conditions, religiosity, and political orientation

Predicting:	df	F	p	Effect [†]	Regression		
					B	(SE)	t
Explicit attitudes (N = 585)	4	70.21	<.0001	.326			
Covariate: religiosity	1	40.56	<.0001	.065	.40	(.063)	6.37
Covariate: politics	1	156.31	<.0001	.212	-.41	(.033)	-12.50
Golden rule priming	2	3.38	.035	.012			
Perceived controllability (N = 584)	4	27.72	<.0001	.161			
Covariate: religiosity	1	22.65	<.0001	.038	.34	(.071)	4.76
Covariate: politics	1	49.89	<.0001	.079	-.26	(.037)	-7.06
Golden rule priming	2	3.58	.029	.012			
Implicit attitudes (N = 435)	4	2.96	.020	.027			
Covariate: religiosity	1	5.68	.018	.013	-.04	(.017)	-2.38
Covariate: politics	1	2.21	.138	.005	.013	(.009)	1.49
Golden rule priming	2	.44	.646	.002			

Note: †Effect is the appropriate effect size: η_p^2 for specific effects and R^2 for the overall model. Results are reported as unstandardized regression coefficients bounded by their standard errors (B + SE). Politics = self-ascribed political orientation; Golden Rule Priming = Buddha-attributed; Jesus-attributed, and control conditions. Implicit Attitudes = SPFF Gay scores indexing the strength of associations between gay and good compared to gay and bad.

Figure 1

Mean explicit anti-gay attitudes (± standard error bars) for Christians (N = 585) and Buddhists (N = 381) in the Buddha-attributed Golden Rule, Jesus-attributed Golden Rule, and control conditions

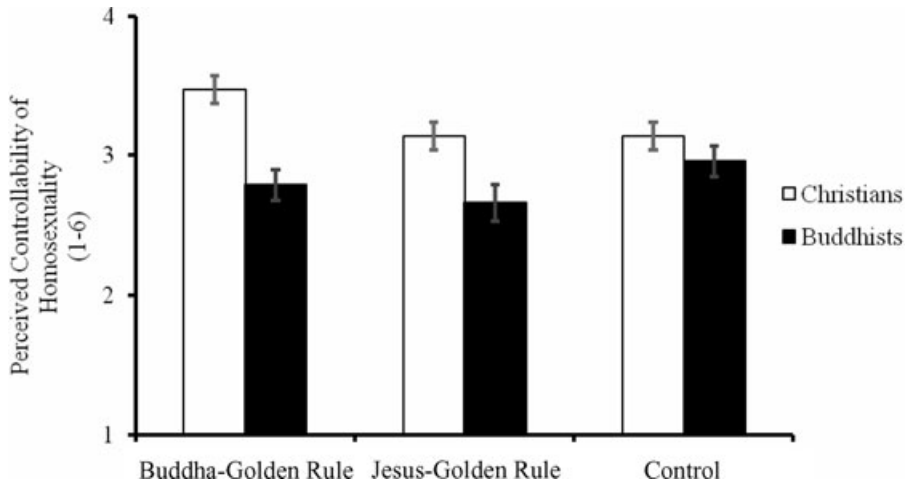


$F(1, 579) = 5.37, p = .021, \eta_p^2 = .009$, who did not differ significantly from those in the Jesus-attributed condition, (adj- $M = 3.14$), $F(1, 579) = .002, p = .96, \eta_p^2 = .000$ (see Figure 2).

Across priming conditions, Christians did not differ in their implicit attitudes toward gay people, $F(2,430) = .44, p = .65, \eta_p^2 = .002$.

Figure 2

Mean perceived controllability of homosexuality (\pm standard error bars) for Christians ($N = 584$) and Buddhists ($N = 381$) in the Buddha-attributed Golden Rule, Jesus-attributed Golden Rule, and control conditions



Results for Buddhists

Overall, priming the Golden Rule did not significantly affect Buddhists' explicit anti-gay attitudes, $F(2, 376) = .25, p = .78, \eta_p^2 = .001$, the perceived controllability of homosexuality, $F(2, 376) = 1.78, p = .17, \eta_p^2 = .009$, or implicit preferences for gay people, $F(2, 273) = .029, p = .97, \eta_p^2 = .000$ (see Table 2).

Differences Among Citizens of Predominantly Christian and Buddhist Countries

Although participants were randomly assigned to the study from a pool of available studies, registered users of the Project Implicit site do not represent a definable population and are not representative of the U.S. or world population (Nosek et al. 2007). For example, many Buddhists visiting Project Implicit reported living in predominantly Christian countries. Simultaneously, the website did not attract many Christians who live in predominantly Buddhist countries. This asymmetry in our religious samples may have important implications for interpretation. For example, the predominant religion of a country may influence religious believers' attitudes toward gay people. Believers whose religion is not predominant in their countries may be more tolerant toward religiously stigmatized social groups than those whose religion is predominant in their countries (Hunsberger, Owusu, and Duck 1999). We conducted follow-up analyses by coding a dummy variable to compare Buddhist citizens of predominantly Christian countries ($n = 426$) with those of predominantly Buddhist countries ($n = 46$).⁴ The predominant religion of Buddhists' country of citizenship predicted explicit gay attitudes, $F(1, 367) = 11.04, p = .001, \eta_p^2 = .029$, such that Buddhists from predominantly Christian countries ($\text{adj-}M = 1.60$) reported less negative gay attitudes than Buddhists from predominantly Buddhist countries ($\text{adj-}M = 2.14$). Similarly, they ($\text{adj-}M = 2.70$) were significantly less likely to agree that homosexuality is a choice

⁴ Controlling for religiosity and political orientation, no significant interaction effects of predominance of religion \times religion affiliation \times priming condition were observed on attitudes toward gay people (all $F_s \leq 2.63, ns$).

Table 2: Results of general linear model (GLM) analysis among Buddhists, predicting explicit and implicit attitudes toward gay people by the Golden Rule priming conditions, religiosity, and political orientation

Predicting:	<i>df</i>	<i>F</i>	<i>p</i>	Effect [†]	Regression		
					<i>B</i>	(<i>SE</i>)	<i>t</i>
Explicit attitudes (<i>N</i> = 381)	4	19.82	<.0001	.174			
Covariate: religiosity	1	.70	.402	.002	.05	(.055)	.84
Covariate: politics	1	77.34	<.0001	.171	-.30	(.033)	-8.79
Golden rule priming	2	.25	.782	.001			
Perceived controllability (<i>N</i> = 381)	4	8.64	<.0001	.084			
Covariate: religiosity	1	1.42	.234	.004	.09	(.079)	1.19
Covariate: politics	1	30.41	<.0001	.075	-.27	(.048)	-5.52
Golden rule priming	2	1.78	.170	.009			
Implicit attitudes (<i>N</i> = 278)	4	2.17	.073	.031			
Covariate: religiosity	1	.03	.870	.000	-.003	(.012)	-.16
Covariate: politics	1	8.82	.0040	.031	.036	(.021)	2.94
Golden rule priming	2	.03	.971	.000			

Note: †Effect is the appropriate effect size: η_p^2 for specific effects and R^2 for the overall model. Results are reported as unstandardized regression coefficients bounded by their standard errors (*B* + *SE*). Politics = self-ascribed political orientation; Golden Rule Priming = Buddha-attributed, Jesus-attributed, and control conditions. Implicit Attitudes = SPF Gay scores indexing the strength of associations between gay and good compared to gay and bad.

than Buddhists living in predominantly Buddhist countries (*adj-M* = 3.47), $F(1,367) = 9.86$, $p = .001$, $\eta_p^2 = .026$.

Buddhists from predominantly Buddhist countries did not significantly differ from Christians in predominantly Christian countries in their explicit gay attitudes, $F(1,602) = .05$, $p = .819$, $\eta_p^2 = .000$, but were more likely to believe that homosexuality is a choice, $F(1,602) = 6.06$, $p = .014$, $\eta_p^2 = .010$. However, Buddhists in predominantly Christian countries reported significantly lower explicit negativity toward gay people, $F(1,911) = 33.25$, $p < .0001$, $\eta_p^2 = .035$, than Christians living in predominantly Christian countries, but they did not significantly differ in their belief that homosexuality is a choice, $F(1,910) = 2.49$, $p = .113$, $\eta_p^2 = .003$.

DISCUSSION

The present research investigated how priming a tolerant religious message such as the Golden Rule influenced Christians' and Buddhists' attitudes toward a religiously stigmatized social group—gay people. We predicted that priming the Golden Rule would decrease negativity toward gay people, especially when it was attributed to the leader of one's religion. Instead, the Golden Rule priming had no effect when communicated by one's own religious leader. However, when the Golden Rule messages were attributed to the Buddha (a religious outgroup leader), Christians self-reported being more explicitly negative toward gay people and more likely to believe that homosexuality is a choice. Buddhists were unaffected by the Golden Rule priming, and implicit attitudes toward gay people did not differ across conditions for either Christians or Buddhists.

This adds to research on prejudice reduction because the results suggest that when a tolerant message comes from a religious outgroup figure, it does not increase but instead may decrease tolerance toward another outgroup. Research on prejudice reduction has focused on reminding ingroup members of admired outgroup members in order to increase positivity toward that

outgroup (Dasgupta and Greenwald 2001; Dasgupta and Rivera 2008). In our case, a message designed to increase tolerance, on the contrary, was associated with less tolerance when it came from a religious outgroup leader, at least among Christians. This effect also occurred for Christians' perceptions of the controllability of homosexuality. This did not occur for Buddhists. However, the difference between Christians and Buddhists is tentative because of the nonsignificant overall interaction between the priming condition and religious affiliation. Moreover, while reliable, it should be noted that the effect sizes are relatively small. With such a subtle manipulation, this may not be surprising.

The reactance effect is not unprecedented for group members' responses to criticism from an outgroup member (Hornsey 2005) or proposed policy from a different political party (Cohen 2003; Gómez et al. 2008). This highlights the risks and challenges of interventions to increase tolerance. The effectiveness of tolerance messages may depend on who the messenger is. The notions that the ingroup's beliefs are more likely to be correct and that other groups should not try to impose their belief systems may all elicit some reactance to messages from members of other groups challenging the ingroup's beliefs (Hornsey 2005). Ingroup members may also be particularly sensitive to moral messages from outgroup members (Stephan and Stephan 2000).

It is easy to understand how a negative statement from an outgroup member ("You are prejudiced") would produce reactance. It is less obvious how a positive message of tolerance could have the same effect. An outgroup member's message of tolerance may be perceived as a negative judgment of the perceiver's present moral status, rather than as a universal message of compassion (Gómez et al. 2008). Perceivers might be especially sensitive to an implied moral criticism when an outgroup member delivers a moral message—"Why else would he be telling me this unless he thought I was not tolerant?" In that sense, from the perceivers' perspective, an outgroup member does not have the proper "credentials" to deliver moral messages, even with a positive framing. In the most limited case, if a messenger is perceived as an outgroup member, especially for a belief-system outgroup, it may be very difficult for the moral message to be persuasive. On the other hand, it may be possible with an endorsement of an ingroup member for outgroup members to appeal to superordinate group membership—for example, a common humanity—to redefine the ingroup in order to increase the message's impact (Gómez et al. 2008).

Buddhists and Possible Effects of Having Religion as Minority Status

Buddhists did not show any differences in negativity toward gay people when they viewed neutral messages compared to the Golden Rule messages attributed to either the Buddha or Jesus. However, follow-up analyses revealed that the predominant religion in one's home country was associated with Buddhists' prejudice toward gay people. Buddhists who lived in countries where their religion had minority status self-reported weaker negativity toward gay people than other Buddhists as well as Christians whose religion was predominant in their countries. While only speculative, one explanation for this pattern is that religious adherents are especially sensitive to discrimination against other minority groups when they themselves possess minority status in their cultural context (Hicks and Lee 2006; Lewis 2003). Even in cultures that value religious tolerance, the religious practices—holidays, events, and traditions—of the dominant culture permeate the cultural sphere (Rowatt et al. 2009). Buddhists in predominantly Christian countries are likely confronted with daily reminders of the beliefs of the dominant religion and that their belief systems are not the norm. As a consequence, religious minorities may be especially attuned to the challenges of minority status and therefore adopt a more tolerant perspective toward other minorities or stigmatized groups (Lewis 2003). More conclusive evidence for this possibility will require replicating and extending this finding across groups and samples.

Limitations and Future Directions

We expected that priming the Golden Rule as attributed to Jesus would decrease anti-gay sentiments among Christians, but it had no effect. It is possible that the Golden Rule messages from Jesus may have been less effective because most of our participants live within a Judeo-Christian society. Such participants may be relatively immune to priming a religious message from Jesus as opposed to the Buddha because they may encounter Christian religious messages on a daily basis. However, religious messages from the Buddha may stand out particularly to Christians because it may be unusual to encounter messages from the Buddha (Smith 2002).

A limitation of this study is that our priming deliberately confounded a religious leader and the Golden Rule. We cannot conclude that the Golden Rule itself drives the priming effect among Christians. Instead, it may be that the presence of a religious leader or the additive effects of both the religious leader and the Golden Rule content drove the effect. For example, future studies could prime Jesus and the Buddha without any moral messages to confirm that the message delivery was an important contributor to the reactance effect. Similarly, the Golden Rule message could be delivered by group members other than Jesus or the Buddha to test whether the religions' founders are particularly more or less likely to elicit reaction to the moral message.

Besides controlling for religiosity and political orientation, we did not examine potential moderators within religious groups. It is possible, for example, that the priming was differentially effective depending on participants' familiarity with the Golden Rule or their particular beliefs about religious teachings about homosexuality (Duck and Hunsberger 1999; Veenvliet 2008). For instance, Christians who perceive their religious group to teach "hate the sin, love the sinner" compared to Christians who perceived their groups to teach otherwise were more tolerant toward gay people (Veenliet 2008). This difference may also moderate reactions to Golden Rule priming.

Conclusion

This present research provided insight into Buddhists' and Christians' attitudes toward gay people and their responsiveness to messages of tolerance from ingroup and outgroup religious leaders. Although the Golden Rule has an important influence on religious believers (Wattles 1996), its message of compassion may backfire if it is seen as coming from an outgroup source. This suggests that it is not just the message, but also the qualities of the messenger, that will determine the effectiveness of appeals for tolerance.

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