Religiosity, Political Orientation, and Consequentialist Moral Thinking

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Abstract

Three studies demonstrated that the moral judgments of religious individuals and political conservatives are highly insensitive to consequentialist (i.e., outcome-based) considerations. In Study 1, both religiosity and political conservatism predicted a resistance towards consequentialist thinking concerning a range of transgressive acts, independent of other relevant dispositional factors (e.g., disgust sensitivity). Study 2 ruled out differences in welfare sensitivity as an explanation for these findings. In Study 3, religiosity and political conservatism predicted a commitment to judging “harmless” taboo violations morally impermissible, rather than discretionary, despite the lack of negative consequences rising from the act. Furthermore, non-consequentialist thinking style was shown to mediate the relationship religiosity/conservatism had with impermissibility judgments, while intuitive-thinking style did not. These data provide further evidence for the influence of religious and political commitments in motivating divergent moral judgments, while highlighting a new dispositional factor, non-consequentialist thinking style, as a mediator of these effects.

Keywords: religiosity; political conservatism; moral judgment; consequentialist thinking; deontology; moral dumbfounding; intuitive thinking; disgust sensitivity

Religiosity, Political Orientation, and Consequentialist Moral Thinking

Growing evidence suggests that political and religious orientation influence the way people approach morality (Graham & Haidt, 2010; Graham, Haidt, & Nosek, 2009; Haidt, 2007; Inbar, Pizarro, Knobe, & Bloom, 2009; Janoff-Bulman, Sheikh, & Baldacci, 2008; Piazza, 2012; van Leeuwen & Park, 2009). In America, political liberals and conservatives tend to disagree on a number of "hot button" social issues, such as same-sex marriage, abortion, and recreational drug use (Putnam & Campbell, 2010). However, emerging evidence suggests that political and religious identity may have other implications for moral decision-making, beyond well-established differences in social values.

One recent line of research suggests that political conservatives differ from their liberal counterparts in that they tend to "moralize" (i.e., elevate to moral concern) a greater range of social actions, beyond those involving welfare or justice (Graham et al., 2009). Specifically, conservatives seem to react more strongly than liberals to violations of group loyalty, authority, and sexual/bodily purity—transgressions that arguably have more to do with the loosening of social bonds between individuals, or challenges to the status quo. One explanation for this difference is that conservatives have a greater psychological need to manage threats and uncertainty (Janoff-Bulman et al., 2008; van Leeuwen & Park, 2009). Conservatism has been linked to a view of the world as a dangerous place (Altemeyer, 1998; Duckitt, 2001; Jost, Glaser, Kruglanski, & Sulloway, 2003), and this heightened tendency to perceive danger seems to promote a stronger emphasis on "binding" social actions. Given the increasing overlap between political orientation and religiosity in recent history, particularly in the United States (Guth, Kellstedt, Smidt, & Green, 2006; Layman & Carmines, 1997; Olson & Green, 2006; Putnam & Campbell, 2010), similar moralizing patterns are likely to be found for religious individuals as well.

Religiosity and political orientation may have other implications for morality, beyond the moralization of binding social actions or the elevation of safety motivations. Recent research by Piazza (2012) demonstrated that American individuals committed to orthodox Christian teachings preferred justifications that invoked a governing deontological rule (e.g., *one should respect parental authorities*), rather than justifications that invoked the occurrence of harmful outcomes (e.g., hurt feelings, social discord), as reasons for condemning a negative act. Furthermore, these preferences could not be explained by psychological factors separate from religious beliefs (e.g., need for structure, right-wing authoritarianism, or cognitive simplicity). In a similar vein, Tetlock (2003) reported that Christian fundamentalists often reject the notion that a "sacred value" (e.g., the inherent value of human life) should ever be discarded in the pursuit of a greater good, particularly a secular good (e.g., monetary gain).

These empirical trends suggest that religious individuals, and perhaps political conservatives, may be fairly insensitive to outcomes when forming moral judgments, yet to date no systematic investigation of this possibility has been made. The present studies fill this gap by demonstrating in a more comprehensive manner that religious and conservative individuals eschew various forms of consequentialist decision-making. Across three studies, we show that religious/conservative individuals condemn moral violations even when they (a) produce more overall good than bad (Study 1), (b) prevent the occurrence of even greater wrongdoing (Study 2), or (c) cause no negative consequences at all (Study 3). We find that religious/conservative individuals are dispositionally non-consequentialists, and that this cognitive disposition cannot be explained simply by greater disgust sensitivity (Study 1), a general insensitivity to welfare (Study 2), or by an intuitive-cognitive style (Study 3).

Consequentialist Thinking and the Current Studies

Consequentialism is the ethical position that the moral right or wrongness of an action stems from the act's consequences, whether immediate or distal, rather than something inherent about the act itself (Mill, 1861; Rosen, 2003; Sinnott-Armstrong, 2009a, b).

Consequentialists argue that the right or wrongness of an act derives solely from its net good or bad effects. By contrast, *deontologists* (or non-consequentialists) argue that the right or wrongness of an act is inherent in its consistency with, or deviation from, a universal moral rule, or as a function of the act itself, irrespective of the act's overall consequences (Alexander & Moore, 2008; Kant, 1797/1966). Strict deontologists, therefore, may eschew consideration of the consequences of an act in their moral judgments, even when the consequences would optimize welfare for the greatest number of people or prevent even worse outcomes (Baron & Spranca, 1997; Kohlberg, 1969).

In three studies we examined the degree to which political orientation and religiosity determines a person's willingness to engage in consequentialist moral thinking. All three studies utilized a newly developed instrument for assessing consequentialist-thinking style across a range of moral transgressions (Piazza, Russell, & Sousa, 2012). This 13-item measure was adapted from Lombrozo's (2009) 6-item measure, which included actions mostly related to harm (e.g., assassination, murder). Piazza et al. (2012) revised and expanded Lombrozo's measure to cover a broader range of transgressions, many of which have only an indirect or remote relationship with harm/welfare, if at all (e.g., breaking a promise, defying authority). The instrument assesses the degree to which respondents utilize outcomes within their moral judgments by having participants report whether it would be morally impermissible, permissible, or obligatory, to commit a norm violation if it were to produce more good than bad outcomes.

In Study 1 we examined correlations between political conservatism, religiosity, and this new consequentialist-thinking style instrument, while controlling for disgust sensitivity (DS). A recent survey of political conservatism across ten different geographical regions found consistent moderate-size correlations between political conservatism and DS (Inbar, Pizarro, Iyer, & Haidt, 2012). Other research has obtained moderate correlations between DS and religiosity, DS and a preference for deontological rationales (Russell & Piazza, 2012), as well as links between DS and condemnation towards particular social acts (e.g., homosexuality; Inbar et

al., 2009). Thus, an important first step was to control for covariance between DS, religiosity, and political conservatism. In Study 2, we sought to rule out welfare insensitivity as an explanation for the results of Study 1. In Study 3, we extended the investigation using a different operationalization of consequentialist thinking. We utilized Haidt, Bjorklund, and Murphy's (2000) "moral dumbfounding" paradigm, in which participants are presented descriptions of emotionally provocative norm-violating actions that produce no foreseen negative consequences. This paradigm allowed us to test the hypothesis that conservatives and religious individuals would largely ignore the lack of negative consequences and persist in judging harmless taboo violations as impermissible, and that our measure of consequentialist-thinking style would significantly mediate these judgments.

Study 1

Method

Participants, materials and procedures. A total of 349 adults (141 female; M_{age} = 29.91 years, SD=11.66) residing in the U.S. participated via Amazon's Mechanical Turk (www.mturk.com) in exchange for payment; 80% White, 20% other ethnicities. All participants answered the 13-item Consequentialist Thinking Scale (CTS; Piazza et al., 2012), the 32-item Disgust Scale (Sample 1: *n*=144; Cronbach's α=.85; Haidt, McCauley, & Rozin, 1994) or the 21-item Three-Domain Disgust Scale (Sample 2: *n*=205; α=.77; Tybur, Lierberman, & Griskevicius, 2009), and answered a number of demographic questions, including age, gender, level of education, and measures of political orientation (1 = *Very liberal*; 4 = *Moderate*; 7 = *Very conservative*) and religiosity (1 = *Not at all religious*; 7 = *Very religious*). Sample 1 participants were excluded from participation in Sample 2. Scores for the two disgust sensitivity (DS) scales were standardized and then aggregated to form a composite DS index, across the two samples.

The standard version of Consequentialist Thinking Scale (CTS) has participants provide their moral position on 13 different actions, presented in a randomized order: *killing, assisted suicide, torture, incest, cannibalism (eating the flesh of a dead person), malicious gossip,*

stealing, lying, deception, betrayal, breaking a promise, breaking the law, and *treason (defying governing authorities)*. For each action, participants are given three options, and selected which option best characterized their position—e.g., for breaking a promise:

(1) It is never morally permissible to break a promise (deontological choice)

(2) If breaking a promise will produce greater good than bad, then it is morally permissible to break a promise (weak consequentialist choice)

(3) If breaking a promise will produce greater good than bad, then it is morally obligatory to break a promise (strong consequentialist choice)

Higher scores thus represent increasing sensitivity to consequences in moral decision-making. The internal reliability of the scale was good (Cronbach's α=.83), and thus the 13 items were aggregated to form an overall index of consequentialist-thinking style.

Results and Discussion

Consequentialist thinking by transgression. We calculated correlations between religiosity and political conservatism and overall consequentialist-thinking scores, and for each of the 13 transgressions (see Table 1). As can be seen, religiosity significantly negatively correlated with consequentialist judgments for all but two transgressions (breaking a promise and torture), which were uncorrelated. Political conservatism significantly negatively correlated with consequentialist judgments for eight out of the thirteen cases, and marginally for two of them. Nevertheless, different from religiosity, conservatism correlated positively with consequentialist thinking with regards to torture.

[Insert Table 1 about here]

Variables predicting consequentialist thinking. We entered the demographic variables (age, gender, education), standardized DS scores, political conservatism, and religiosity simultaneously into a linear regression predicting our index of consequentialist-thinking style. As predicted, both religiosity and conservatism independently predicted consequentialist thinking, though this negative relationship was somewhat stronger for religiosity

(religiosity, β=-.21, t(342)=-3.82, p<.001; conservative, β=-.14, t(342)=-2.62, p<.01). DS was also negatively predictive of consequentialist thinking, β=-.15, t(342)=-2.89, p<.01, independent of the other variables, which all failed to independently predict consequentialist thinking (βs<.07, ps>.22).

In sum, both political conservatism and religiosity predicted a general insensitivity to consequences, independent of disgust sensitivity and other demographic variables, though conservatism significantly correlated with a consequentialist approach towards torture—a finding which has some previous empirical support (see Carlsmith & Sood, 2009).

Study 2

In Study 1, consequentialist choices were framed in terms of maximizing goodness. It is possible that participants interpreted "greater good" narrowly to mean welfare (e.g., preventing further harm). Since research on Moral Foundations (Graham et al., 2009) has found that conservatives are relatively less concerned about welfare than liberals, it is possible that non-consequentialist judgments in Study 1 might be explained in terms of conservatives/religious individuals' overall lesser concern for welfare. Study 2 sought to rule out this alternative account by reframing the consequentialist options in terms of preventing more of the same kind of transgression (e.g., breaking a promise to prevent the breaking of other promises), to circumvent a narrow welfarist interpretation. If differences in welfare valuation are all that is driving non-consequentialist judgments (as opposed to a deontological cognitive style), then the relationship between religiosity/political orientation and consequentialist thinking should vanish with this "in-kind" framing.

Method

Participants, materials and procedures. A total of 147 adults (61 female; M_{age} = 34.67 years, SD=13.73) residing in the U.S. participated in a survey study via the same Web service (www.mturk.com); participants from Study 1 were excluded. This time religiosity was assessed using the 10-item Santa Clara Strength of Religious Faith Questionnaire (Plante & Boccaccini,

1997; e.g., “My religious faith is extremely important to me”; α=.98), rated 1 (*Not at all true of me*) to 9 (*Extremely true of me*). Political orientation was rated with three items: orientation on social issues, economic issues, overall (1 = *Extremely liberal*; 7 = *Extremely conservative*; α=.92). The consequentialist options for the 13-item CTS were reworded in terms of preventing “even worse” or “even more” violations of the same kind (e.g., “If breaking the law will prevent even more law breaking, then it is morally permissible to break the law”). The reliability of this “in-kind” version of the scale was good (α=.80). Participants answered the CTS prior to demographic questions.

Results and Discussion

Religiosity and political conservatism were highly correlated, $r(147)=.46$, $p<.001$. As can be seen in Table 1, religiosity and conservatism was overall negatively related to consequentialist judgments, and the pattern of correlations for the specific transgressions were mostly consistent with Study 1, though there were slightly more marginal negative correlations this time, especially for conservatism. In short, a general welfare-sensitivity explanation alone cannot account for the pattern of results.

Finally, within a multiple regression, only religiosity uniquely predicted CTS scores, $\beta=-.36$, $t(140)=-3.96$, $p<.001$ (conservatism: $\beta=-.03$, $t(140)=-.33$, $p=.74$), over and above other demographic variables (age, gender, SES, and education). Thus, the religious aspects of political conservatism appear to be driving the relationship this variable had with the CTS within this study.

Study 3

Study 3 extended the current line of investigation to judgments of “harmless” transgressions. From a consequentialist perspective, moral violations that do not produce negative effects should not be morally condemned, but seen as discretionary. Nevertheless, past research by Haidt et al. (2000) suggests that many people persist in their condemnation of certain moral violations, particularly emotionally-evocative social taboos (e.g., incest; Haidt,

Koller, & Dias, 1993), even when they cause no immediate or foreseeable negative consequences. One potential explanation for such stubborn moral judgments, put forth by Haidt and others (Haidt, 2001, 2007; Haidt & Joseph, 2004), is that judgments of this kind are guided by intuition, or "judgments, solutions, and ideas that pop into consciousness without our being aware of the mental processes that led to them" (Haidt & Joseph, 2004; p. 56), as opposed to careful deliberation about the consequences. If this were the case, then we would expect to find that highly intuitive thinkers—who tend to trust their immediate intuitions, rather than carefully deliberating over the facts—would be less willing to engage in a consequentialist analysis of these harmless taboo cases. Insofar as religious individuals tend to adopt an intuitive-thinking style, over a more reflective-thinking style (see Shenhav, Rand, & Greene 2011), it is plausible that any link between religiosity/conservatism and a commitment to condemning harmless taboo violations might be explained by intuitive thinking.

An alternative hypothesis, which we test here, is that religious and politically conservative individuals will persist in their condemnation of harmless norm violations, not because of their tendency towards intuitive thinking, but because they are reluctant to engage in consequentialist thinking—that is, they tend to think of norm violations as wrong regardless of the consequences—and this is what explains their commitment to judging "harmless" violations as impermissible.

In Study 3, we tested these competing hypotheses using an adaptation of the moral dumbfounding paradigm (Haidt et al., 2000). Participants offered moral judgments of harmless, yet emotionally-provocative, taboo violations. Those who insisted that the harmless taboo violation was impermissible were provided counterarguments and given a chance to change their position. We predicted that political conservatism and religiosity would be associated with a commitment to judging the acts impermissible, as well as more intense levels of moral emotions. Most importantly, we predicted that our measure of consequentialist thinking would

mediate any relationship between religiosity/conservatism and judgments, while an intuitive-thinking style would not serve as a mediator.

Method

Participants. A new sample of 192 adults (75 female; M_{age} = 31.92 years, SD=11.32) were recruited via Amazon's Mechanical Turk in exchange for payment; 54% U.S. residents, 46% were residents of India.

Materials and procedures. Participants read two vignettes, presented in a randomized order, one describing an act of harmless consensual cannibalism, and another describing an act of harmless consensual incest (for vignettes, see Supplementary Materials). The latter vignette was adapted from Haidt et al. (2000), whereas the former was developed by the authors to parallel the cannibalism vignette used by Haidt et al., but with the improvement that the act was set in a context where the cannibalistic act was understood to be a normative practice. For each vignette, participants first answered measures of anger and disgust towards the perpetrator. Each emotion was assessed with four items, following Piazza et al. (2012): anger (*angry, mad, outraged, furious*; α=.95-.96) and disgust (*grossed out, sickened, repulsed, queasy*; α=.92-.93), on a 1-7 scale. These measures also served as a manipulation check on the evocative nature of the taboo violations. Next, participants offered their moral judgment; they were given three options, and were instructed to read all three options before selecting one, e.g.:

1. Personally, <u>I think it's wrong</u> that Julie and Mark had sexual intercourse with each other (in the situation described by the scenario).
2. Personally, <u>I do not think it's wrong</u> that Julie and Mark had sexual intercourse with each other (in the situation described by the scenario). I consider that it is up to them to decide what to do in this situation (and no one else's business); however, I myself would NOT do it if I were in their situation.

3. Personally, I do not think it's wrong that Julie and Mark had sexual intercourse with each other (in the situation described by the scenario). I consider that it is up to them to decide what to do in this situation (and no one else's business); additionally, I myself would do the same as them if I were in their situation.

The first option represents a ruling that the act is impermissible; the second a ruling that the act is permissible, but that the respondent would not personally engage in the act; the third option represents a ruling that the act is permissible, and that the respondent would personally engage in the act. We did not expect many participants to select this third option; however, the purpose of including two different permissibility options was to avoid the possibility that participants are simply selecting the first option for reasons having to do with social desirability (cf. Haidt et al., 2000). If participants selected the first option ("I think it's wrong"), they were taken to a new page where they were presented counterarguments that reiterated the features of the scenario that eliminated the possibility of harm, injustice, or negative consequences deriving from the act (for counterarguments and full instructions, see Supplementary Materials).

After reading the counterarguments, this group of participants was asked whether they still thought the act was wrong, and were given two options, e.g.: (1) Yes, their action of having sex with one another is wrong; or (2) No, their action of having sex with one another is not wrong. I consider that it is up to Julie and Mark to decide what to do in this situation; however, I myself would NOT do it. Participants who persisted in describing the act as "wrong" (impermissible) were assigned a score of 0; those who ultimately selected one of the permissibility options were given a score of 1.[1]

[1] Consistent with Haidt et al. (2000), very few participants modified their impermissibility judgments after considering the counterarguments (six out of 95 for cannibalism; seven out of 114 for incest).

Afterwards, participants answered a 10-item-version of the standard CTS (α=.77; see Supplementary Materials), the Cognitive Reflection Test (CRT; Frederick, 2005), a commonly used measure of intuitive-thinking style, and the demographic measures from Study 1. Following Shenhav et al. (2011), we scored the CRT in terms of the number of intuitive responses given rather than the number of correct responses given to avoid scoring nonintuitive incorrect responses as intuitive (for further description, see Supplementary Materials).

Results and Discussion

Nationality did not significantly influence permissibility judgments (see Supplementary Materials) and thus was omitted from further analysis.

Preliminary analysis. More disgust than anger was elicited by the vignettes (see Supplementary Materials). Table 2 displays correlations between the main trait and emotion variables. As in Studies 1-2, religiosity correlated negatively with consequentialist thinking, as did political conservatism. Religiosity correlated positively with CRT-intuitive thinking style; however, political conservatism was not significantly related to an intuitive-thinking style. CTS-consequentialist thinking and CRT-intuitive thinking were negatively correlated. Consequentialist thinking was negatively associated with high levels of anger and disgust, for both vignettes, while CRT scores were mostly unrelated to emotions, with the exception of anger within the cannibalism vignette. Religiosity and conservatism correlated significantly with emotions for all but cannibalism-directed disgust.

Permissibility judgments. For the cannibalism vignette, consequentialist thinking correlated positively with permissibility judgments, $\rho(192)=.38$, $p<.001$, while CRT-intuitive thinking correlated negatively, $\rho(192)=-.14$, $p=.051$, as did political conservatism, $\rho(192)=-.23$, $p=.001$, and religiosity, $\rho(192)=-.25$, $p<.001$. In a simultaneous binary logistic regression, political conservatism independently predicted permissibility judgments, $B=-.24$, $Wald(1)=4.80$, $p=.028$, while religiosity only marginally predicted judgments, $B=-.16$, $Wald(1)=3.51$, $p=.061$. Thus, mediation analyses for cannibalism were conducted only for conservatism (see below).

For incest, consequentialist thinking correlated positively with permissibility judgments, $\rho(192)=.23$, $p<.01$, while political conservatism, $\rho(192)=-.15$, $p<.05$, and religiosity, $\rho(192)=-.25$, $p<.001$, correlated negatively, though CRT-intuitive thinking was unrelated to permissibility judgments for incest, $\rho(192)=-.07$, $p=.36$. In a simultaneous binary logistic regression, religiosity alone predicted permissibility judgments, $B=-.22$, $Wald(1)=6.70$, $p=.01$ (conservatism: $B=-.06$, $Wald(1)=.35$, $p=.553$). Thus, mediation analyses for incest were conducted only for religiosity (see below).

[Insert Table 2 about here]

To determine whether consequentialist-thinking style predicted permissibility judgments independent of CRT-intuitive thinking and levels of anger and disgust, we conducted binary logistic regressions for each vignette, entering CTS and CRT scores simultaneously, along with anger and disgust. CTS predicted permissibility judgments independent of these other variables, across vignettes (Cannibalism: $B=2.29$, $Wald(1)=15.45$, $p<.001$; Incest: $B= 1.25$, $Wald(1)=5.99$, $p<.02$), while intuitive-thinking style failed to independently predict judgments (Cannibalism: $B=-.15$, $Wald<1$, *ns*; Incest: $B=-.07$, $Wald<1$, *ns*). While disgust made an independent contribution to judgments for both vignettes (Cannibalism: $B=-.32$, $Wald(1)=7.44$, $p<.01$; Incest: $B=-.42$, $Wald(1)=12.35$, $p<.001$), anger made an independent contribution only to judgments for cannibalism ($B=-.29$, $Wald(1)=8.37$, $p<.01$; Incest: $B=-.04$, $Wald<1$, *ns*).

Mediation analysis. We conducted two separate bootstrapping analyses with multiple mediators (Preacher & Hayes, 2008), one with religiosity as the independent variable (incest; Figure 1a), and one with political conservatism as the independent variable (cannibalism; Figure 1b). CTS and CRT scores were included as simultaneous mediators in both analyses. As can be seen in Figure 1a and 1b, consequentialist thinking significantly mediated the relationship religiosity had with permissibility judgments for consensual incest, and the relationship conservatism had with permissibility judgments for cannibalism, while not once did CRT mediate these relationships to a significant degree. In both analyses, 95% confidence intervals (CIs) for

the coefficient of the indirect effect of conservatism/religiosity on permissibility judgments through CTS scores did not overlap with 0 (religiosity, Incest CIs: -.10 to -.01; conservatism, Cannibalism CIs: -.19 to -.03), while the CIs for the CRT scores did overlap with 0 (religiosity, Incest CIs: -.04 to .06; conservatism, Cannibalism CIs: -.05 to .01), though the direct relationships between religiosity/conservatism and permissibility remained significant.

In sum, consequentialist-thinking style significantly mediated the relationship that conservatism/religiosity had with judging harmless taboo violations as morally impermissible, while an intuitive-thinking style was not a mediator.

[Insert Figure 1a, b about here]

General Discussion

The present studies illuminate a novel dispositional-level cognitive process by which religiosity and political orientation affect moral judgment. The findings show that political conservatives and religious individuals are highly prone to eschew consequentialist thinking, across a wide variety of moral actions. Except in highly narrow cases (e.g., torture, for conservatives), the moral judgments of religious and conservative individuals were relatively insensitive to outcomes, and this insensitivity cannot be attributed to the greater disgust sensitivity (Study 1), reduced valuing of welfare (Study 2), or greater intuitive-thinking style (Study 3), exhibited by these individuals. Furthermore, it is not the case that religiosity exclusively accounts for the relationship political conservatism has with non-consequentialist thinking (or vice-versa), since at times political conservatism predicted judgments independent of religiosity, though religiosity tended to share relatively more unique variance with the CTS overall, suggesting that certain aspects of political orientation unrelated to religiosity (e.g., economic views) may be orthogonal to the moral judgments we examined here.

These findings extend past findings by Piazza (2012). Piazza's studies focused on religiosity and provided participants with the option of justifying their condemnation for various acts, along a continuum, by either appealing to the violation of a rule or a negative

consequence. Measures of religiosity were found to uniquely predict a greater appeal to rules than outcomes as justifications for their condemnation. The current research extends these findings in a number of ways, providing a more comprehensive test of the hypothesis that religious and political orientation support deontological thinking. We have shown that both religious and conservative-minded individuals are reluctant to endorse the permissibility of various rule violations even when doing so optimizes the good (Study 1), prevents further wrongdoing (Study 2), or produces no negative consequences (Study 3). Additionally, our dispositional measure of consequentialist thinking was shown to uniquely account for religious/conservatives' commitment to making non-consequentialist judgments with regards to social taboo violations, independent of an intuitive-cognitive style (Study 3). While the current line of investigation does not delve into the causal origins of this general disregard for outcomes, a recent study by Piazza and Landy (2013) found that non-consequentialist inclinations were strongest among religious individuals who believe that morality is founded on divine authority (e.g., that moral truths are revealed only by God), which suggests that deontological commitments among religious individuals may be an expression of reverence for divine authority.

One novel contribution of Study 3 is that it provides a competing explanation for Haidt et al.'s (2000) moral dumbfounding effects. The current findings are compatible with Haidt et al.'s own interpretation insofar as these authors emphasize the importance of emotional processes in moral judgment. Indeed, the level of anger/disgust our participants experienced significantly predicted their commitment to judging the act as impermissible.[2] However, our findings are

[2] It is possible that religious/conservative individuals in our study had a difficult time regulating their emotional reactions to the taboo violations, and this is what largely explains their stronger emotional reactions. Although we did not assess differences in emotion-regulation ability (the CRT does not assess emotion regulation), we find it to be an intriguing area of investigation deserving of further attention, especially in light of Greene's (2008) dual-process model which

inconsistent with Haidt et al.'s proposal that intuitive thinking necessarily underlies these effects, insofar as a consequentialist-thinking style, but not an intuitive-thinking style, predicted impermissibility judgments independent of vignette-induced moral emotions. This is not to say that intuition (i.e., automatic thinking processes) more generally never plays a role in such judgments, only that, as argued by Lombrozo (2009), moral commitments, whether consequentialist or deontological, appear to be an important contributor to moral judgments beyond the role played by intuition.

Finally, the current findings have important implications for social decision-making. While deontological judgments have some expressive and interpersonal advantages (e.g., they can communicate strong moral conviction, empathy, and good character, particularly within moral dilemmatic contexts; see Bartels & Pizarro, 2011; Uhlmann, Zhu, & Tannenbaum, 2013), an unyielding commitment to deontological rules or sacred values can interfere with pragmatic solutions when competing interests are in play, or a difficult moral decision must be reached (see Baron & Spranca, 1997; Tetlock, 2003). On the other hand, consequentialist considerations can at times provide a useful vehicle for surmounting otherwise irresolvable moral controversies (e.g., endorsing same-sex marriage on the grounds that it promotes happiness and well-being among loving, consenting adults, rather than opposing it on principle). Thus, in the spirit of conciliation, future research should continue to explore other psychological factors underpinning a commitment to non-consequentialist thinking.

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claims that controlled cognitive processes are essential for quieting emotional responses that conflict with consequentialist decision-making.

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Table 1

Correlations between the Consequentialist Thinking Scale (CTS), political conservatism, and religiosity, across 13 transgressions (Studies 1-2)

	Killing	Assisted suicide	Torture	Incest	Cannibal.	Stealing	Gossip	Lying	Deception	Break promise	Betrayal	Break law	Treason
Study 1 – Maximizing goodness													
Political conservatism	-.03	**-.24**	**.21**	-.10†	**-.21**	**-.21**	-.08	**-.15**	**-.14**	-.10†	**-.18**	**-.21**	**-.27**
Religiosity	**-.11**	**-.35**	-.04	**-.23**	**-.22**	**-.15**	**-.17**	**-.17**	**-.17**	-.04	**-.15**	**-.23**	**-.25**
Study 2 – Preventing more wrongdoing													
Political conservatis	.15†	**-.34**	.15†	-.11	-.09	**-.28**	**-.18**	**-.16**	**-.21**	-.14†	**-.19**	-.15†	-.07

m													
Religiosity	-.10	**-.48**	.00	**-.22**	-.14†	**-.37**	**-.30**	**-.32**	**-.24**	-.16†	**-.23**	**-.21**	-.10

Note. Bolded correlations are significant at $p < .05$. † Marginally significant at $p < .10$. *N*s = 349 (Study 1) and 147 (Study 2).

Table 2

Correlations between the main dispositional and state-level emotion variables from Study 3

	2	3	4	5	6	7	8
1. Religiosity	.53***	-.21**	.28***	.44***	.49***	.14 †	.29***
2. Political Conservatism	-	-.19**	.09	.25***	.31***	.11	.24**
3. Consequentialist	-	-	-.15*	-.22**	-.18*	-.25**	-.16*
Thinking Scale (CTS)							
4. CRT-Intuitive Thinking	-	-	-	.16*	.10	.09	.05
5. Anger (Cannibalism)	-	-	-	-	.62***	.54***	.37***
6. Anger (Incest)	-	-	-	-	-	.35***	.70***
7. Disgust (Cannibalism)	-	-	-	-	-	-	.55***
8. Disgust (Incest)	-	-	-	-	-	-	-

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$. N = 192. CRT = Cognitive Reflection Test.

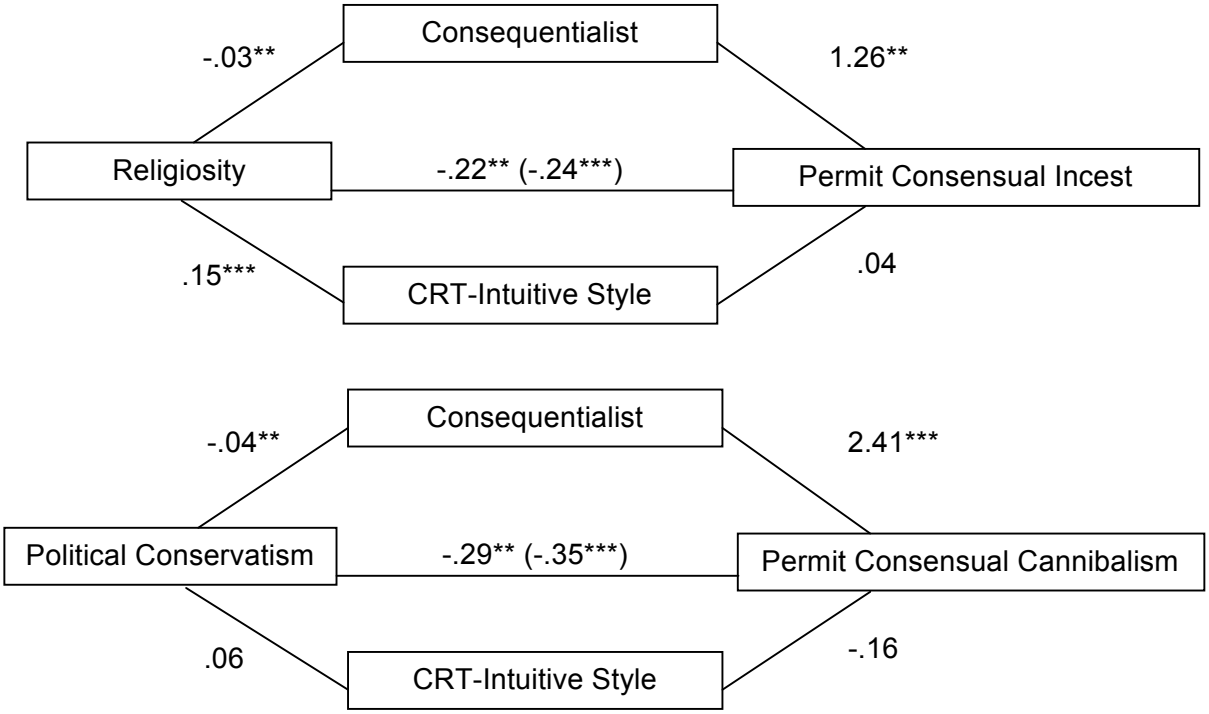

Figure 1. (a) Analysis of consequentialist thinking style (CTS) and Cognitive Reflection Test (CRT) as mediators of religiosity-permissibility relationship for Consensual Incest. (b) Analysis of CTS and CRT as mediators of political conservatism-permissibility relationship for Consensual Cannibalism ** $p < .01$. *** $p < .001$.