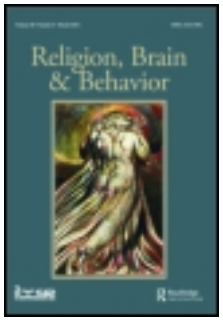

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Catholic guilt? Recall of confession promotes prosocial behavior

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Catholic guilt? Recall of confession promotes prosocial behavior

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Recent studies indicate that prosocial behavior is more likely when one feels guilty or when one's moral ledger has a negative balance. In light of such studies, we wondered whether religious rituals of atonement and absolution are, from the perspective of religious groups, counterproductive mechanisms for addressing the moral transgressions of group members. If sin is a form of capital, might absolution rituals squander that capital? We found that Catholic participants who recalled committing a past sin and being absolved of it donated significantly more money to the church than those who recalled committing the sin but had not yet recalled being absolved of it. This effect was more pronounced the more participants believed in divine judgment and the more they engaged in religious activities such as reading the bible or praying. Our findings indicate that the Catholic ritual of confession is an effective means of promoting commitment to the church. These results complement a cultural evolutionary approach to religious prosociality, whereby religious practices evolve to the extent they contribute to high levels of cooperation in religious groups.

Keywords: absolution rituals; Catholic confession; cooperation; cultural evolution; guilt; morality; prosocial behavior; religion

Introduction

Bless me Father, for I have sinned. It has been _____ since my last confession . . .

So begins the rite of the "Sacrament of Penance and Reconciliation" in the Catholic tradition. Through this ritual, faithful Catholics are absolved of their sins, released from guilt, and reconciled with the Church community (Catholic Church, 2000). But are they brought back into the fold with renewed prosocial vigor?

A number of studies have examined whether participation in religious ritual promotes prosocial behavior. For example, Sosis and Ruffle (2003) compared the intragroup cooperative behavior of members of religious and secular Israeli kibbutzim (see also Ruffle & Sosis, 2007). To do so, they developed an experimental economic game involving two members from the same kibbutz who remained anonymous to each other and made independent decisions in the game. Specifically, each player was told there were 100 shekels in an envelope, and each decided how much money to withdraw from it. If combined withdrawals exceeded 100 shekels, both players received nothing. If combined withdrawals were 100 shekels or less, each player kept what they had withdrawn; moreover, the remainder was multiplied by 1.5

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and split evenly between both players. Sosis and Ruffle found that religious male kibbutzniks were more cooperative than religious females, secular males, and secular females (males are the primary practitioners of collective religious rituals in Orthodox Judaism). Moreover, the frequency with which religious males engaged in collective religious rituals predicted their degree of cooperative behavior.

Such evidence is consistent[1] with the claim that participation in religious ritual increases one's commitment to one's group and cooperation with fellow group members. Indeed, Wilson (2002) suggests that the cooperation engendered by such practices may be essential for the survival of religious groups (see also Sosis & Bressler, 2003). However, in releasing sinners from guilt, rituals of absolution – such as Catholic confession – arguably remove a key motivational force for prosocial behavior. For instance, Regan, Williams, and Sparling (1972) conducted a study in which a man asked women in a shopping center to take his photograph. Women who were led to believe they had broken the man's camera (and so presumably felt guilty) were more likely to help an unrelated third party (a passing shopper who dropped something) than women who were told the camera malfunction was not their fault. More recently, Ketelaar and Au (2003) found that, after pursuing a selfish strategy in a social bargaining game, individuals who felt guilty displayed higher levels of cooperation in a subsequent round of play (even a week later) than individuals who felt no guilt (see also Amodio, Devine, & Harmon-Jones, 2007; De Hooge, Zeelenberg, & Breugelmans, 2007).

Recent studies also suggest that prosocial behavior is more likely when one's moral identity is threatened or when one's moral ledger has a negative balance. Sachdeva, Iliev, and Medin (2009) asked participants to write a story about themselves containing words referring either to positive (e.g., *generous*) or negative (e.g., *greedy*) traits. Later, when given the opportunity to donate to a charity of their choice, those in the negative trait condition donated five times more than those in the positive trait condition. Jordan, Mullen, and Murnighan (2011) found that participants who recalled an immoral act from their past reported stronger prosocial intentions and showed less cheating than people who recalled a moral act from their past. Using this recall paradigm, Zhong and Liljenquist (2006) found that participants who cleansed their hands after describing an unethical deed from their past were subsequently less prosocial than controls who did not cleanse their hands. These authors argued that, in cleansing their hands, the former participants had "washed away their moral stains and restored a suitable moral self" (p. 313).

In light of such studies, one might wonder whether religious rituals of absolution, in which participants are absolved of their sins and released from guilt, are counterproductive mechanisms for addressing the moral transgressions of group members. In the present study, we sought to investigate whether Catholic participants who recalled committing a sin and being absolved of it exhibited more or less prosocial behavior than participants who had recalled committing the sin but had not yet recalled being absolved of it.

Method

Thirty-six Catholic participants (20 females and 16 males) were recruited from online student forums and an advertisement in a local Catholic parish newsletter.[2] All participants received a £5 show-up fee (paid in one-pound coins) at the beginning of the experiment and were randomly assigned to one of two conditions: *Absolved* or

Control. Participants then completed two memory tasks. In the first, they privately recalled a sin they had committed in the past. In the second, they either recalled attending confession for the sin or imagined doing so if they had not in fact attended confession for it. (We asked participants to tick a box to indicate whether they had actually attended confession or merely imagined doing so).

In order to safeguard participant privacy and heed ethical boundaries, we did not ask participants to record or report any details of the sin they recalled. To encourage effortful recall, we instead asked participants to make three Likert-style ratings during each recall task, as follows:

First memory task: committing sin
How pleasant or unpleasant is it for you to recall this unethical deed? (1 = Very unpleasant; 5 = Very pleasant)
How ashamed or unashamed do you feel about this sin? (1 = Very ashamed; 5 = Very unashamed)
How repentant or unrepentant do you feel about committing this act? (1 = Very repentant; 5 = Very unrepentant)

Second memory task: confessing sin
How pleasant or unpleasant do you feel after recalling or imagining confession of this sin? (1 = Very unpleasant; 5 = Very pleasant)
How forgiven or unforgiven do you feel for this sin after recalling or imagining confession of it? (1 = Very unforgiven; 5 = Very forgiven)
How attached or detached do you feel from this sin? (1 = Very attached; 5 = Very detached)

Although we have no details about the sins recalled, the ratings we collected during the first memory task enabled us to check that recalling sins did not elicit stronger emotional reactions in one group than in the other. Mann-Whitney tests confirmed that the distributions of ratings for these questions did not differ across conditions (all p's $>.05$).

In addition to these two key tasks, each participant was given an opportunity to donate to a local Catholic church by placing some money in an envelope. Whether they chose to donate or not, participants were asked to post the envelope through a slot in a sealed collection box (the experimenter left the room briefly at this point). The only difference between conditions was the point at which this donation was collected: either in between the two memory tasks for *Control* participants, or after the second memory task for *Absolved* participants (see Table 1). Immediately prior to the donation task, all participants completed a brief filler task (adapted from Shariff & Norenzayan, 2007) in which they unscrambled ten sets of five words, eliminating a superfluous word from each set to create a grammatical four-word sentence. All sentences contained only neutral words. At the end of the session, all participants completed a questionnaire to measure religious beliefs and practices (see Table 2). On a standard funnel-debriefing questionnaire, three participants expressed suspicion about the donation component of the study and were excluded from the analyses reported here (NB, the overall pattern of results was nonetheless identical with these

Table 1. Order of key procedural elements in each condition.

Absolved	Recall committing sin	→	Recall confessing sin	→	Donation
Control	Recall committing sin	→	Donation	→	Recall confessing sin

participants included). At the end of the study, all of the collected money was then donated to the local Catholic church.

Results

We first investigated the factor structure of our religion questionnaire by performing a principal components analysis with a varimax rotation. This analysis yielded three factors with eigenvalues greater than 1, which we labeled *Divine judgment beliefs*, *Religious activities*, and *Religious sociality* (see Table 2 for factor loadings). We then performed a hierarchical multiple regression analysis with "amount donated" as the criterion variable. In the first block we entered a dummy variable comparing the *Absolved* condition with the *Control* condition; in the second block we simultaneously entered the three religious factors and the interaction of the condition dummy with each of these factors (see Table 3).

Model 1, with the *Absolved* condition as the only predictor, explained 24% of the variance in amount donated (Adjusted $R^2 = .240$) and was highly significant

Table 2. Orthogonally rotated factor loadings for religion questionnaire items.[a]

	Factor		
Questionnaire item[b,c]	*Divine judgment beliefs*	*Religious activities*	*Religious sociality*
I am a religious person	.528		
I often feel God's presence	.690		
I desire to be closer to or in union with God	.617		
I often attend religious services (apart from weddings, funerals, and christenings)			.640
I often pray privately in places other than at church		.719	
I often read the Bible or other religious literature in places other than at church		.779	
I often watch or listen to religious programs on TV, radio or the Internet		.622	
I believe in life after death	.829		
I believe God knows everything we do or think	.843		
I believe in hell	.744		
I believe God will punish sinners	.736		
I believe God will reward believers	.836		
My family are believers			.813
I often interact socially with people who are believers		.752	
How often do you attend confession?			.530

[a]Loadings $\geq .40$

[b]Responses to the first 14 items were entered using a 5-point Likert scale (1 = "strongly disagree"; 5 = "strongly agree"); Responses to the confession attendance item were entered using a 5-point scale (1 = "never"; 5 = "weekly").

[c]The administered questionnaire included several additional items that were removed due to excessive multicollinearity (the determinant of the correlation matrix was less than 0.00001 with these variables included): *I often think about God; I feel God's love for me, directly or through others; Attending religious services is inspiring for me; I believe in God; I believe in heaven; I was raised as a believer.*

Table 3. Models 1 and 2 for Church donations.[a]

	Model 1			Model 2		
	Adj R^2	F	p	R^2 change	F	p
	0.240	11.09	0.002**	0.312	3.06	0.022*
Variable	Beta	t	p	Beta	t	p
Intercept		2.426	0.021*		2.387	0.025*
Absolved condition	0.513	3.330	0.002**	0.569	3.945	0.001**
Divine judgment beliefs				−0.054	0.289	0.775
Religious activities				−0.166	0.817	0.422
Religious sociality				0.047	0.245	0.808
Absolved condition × *Divine judgment beliefs*				0.460	2.529	0.018*
Absolved condition × *Religious activities*				0.464	2.344	0.027*
Absolved condition × *Religious sociality*				0.026	0.137	0.892

[a]An asterisk indicates significance at the 0.05 level; two asterisks indicate significance at the 0.01 level.

($F_{1,31} = 11.09$, $p = .002$). The effect of the *Absolved* condition on donations was also highly significant ($\beta = 0.513$, $p = .002$). Model 2, in which the three religious factors and the interaction of the condition dummy with each of these factors were added, explained significantly more variance (R^2 change $= .312$, $F_{6,25} = 3.06$, $p = .022$). This overall model explained 45.7% of the variance in amount donated (Adjusted $R^2 = .457$) and was also highly significant, ($F_{7,25} = 4.84$, $p = .001$). The main effect of the *Absolved* condition on donations remained highly significant ($\beta = 0.569$, $p = .001$) and there were significant interactions between the condition variable and the religious factors *Divine judgment beliefs* ($\beta = 0.460$, $p = .018$) and *Religious activities* ($\beta = 0.464$, $p = .027$).

In summary, recalling (or imagining) absolution strongly increased church donations,[3] and this effect was more pronounced the more participants believed in divine judgment and the more they engaged in religious activities such as reading the Bible or praying.[4]

Discussion

In view of recent evidence that people are more likely to behave prosocially when they feel guilty, one might view "sin" as a form of capital and assume that to "release" religious adherents from sin is to squander that capital. Our findings, however, indicate that the Catholic ritual of confession is an effective means of promoting commitment to the church. This result complements a cultural evolutionary approach to religious prosociality, whereby religious beliefs and practices evolve to the extent they contribute to high levels of cooperation in religious groups (e.g., Norenzayan & Gervais, 2012; Norenzayan & Shariff, 2008). Accordingly, a key question for future research is whether or not absolution rituals also promote cooperation with out-group members.

A striking real-world illustration of such "non-parochial" altruism (cf. Bernhard, Fischbacher, & Fehr, 2006; Choi & Bowles, 2007; De Dreu et al., 2010) is provided by the Pomio Kivung, a cargo cult inspired partly by the teachings of the Catholic

mission that spread among traditional subsistence farmers living in the forest interior of Papua New Guinea. The Pomio Kivung advocated a novel absolution ritual involving the payment of monetary fines. Despite their poverty, Pomio Kivung followers amassed thousands of dollars in absolution money to fund public services while also making charitable donations to foreigners facing natural disasters in much wealthier countries (Whitehouse, 1995). Future experimental studies are needed to confirm the extent to which various absolution rituals promote cooperative behaviors that extend beyond group boundaries.

Additional research is also needed to clarify the psychological mechanisms underpinning these effects. Given that an increase in positive emotions has been shown to enhance prosocial behavior (Schaller & Cialdini, 1990), one possibility is that absolution rituals promote prosocial behavior by generating positive emotions. A second possibility is that thinking about confession serves as a religious prime. Indeed, a number of studies have shown that religious priming increases prosocial behavior (e.g., Ahmed & Salas, 2011; Shariff & Norenzayan, 2007) and curbs antisocial behavior (e.g., Mazar, Amir, & Ariely, 2008; Randolph-Seng & Nielsen, 2007). One might argue, however, that the prosociality measure we used – donations to the Catholic Church – was itself a religious prime. If so, both of our conditions would have involved religious priming. Another reason to doubt a straightforward priming explanation of our results is that Shariff and Norenzayan (2011) have shown that viewing God as a loving and compassionate figure is reliably associated with higher levels of cheating than viewing God as a more punitive figure (Shariff & Rhemtulla, 2012, replicate this pattern at the societal level). One might therefore predict that thoughts of God in the context of forgiveness and absolution would attenuate – or even *reverse* – the standard religious priming effect. On the other hand, the confession context could serve as a reminder of God's power to inflict punishment. After all, a "forgiving" God is not quite the same as a laissez-faire God, and a God who requires a display of submission before bestowing forgiveness is still a God to be feared.[5]

A related possibility is that despite ostensibly releasing participants from sin, absolution rituals, such as Catholic confession, may actually make past transgressions more salient, resulting in a paradoxical increase in feelings of guilt and stimulating restitutive prosocial behavior. Just as exposing trauma patients to memories of the traumatic event carries the risk of re-traumatizing the victim (Durosaro, Ajiboye, Olawuyi, & Adebanke, 2012), deliberate recall of past transgressions may not be the most effective means of expunging guilt. Cleansing ceremonies that focus less on sin – ceremonies in which the focus is on *ablutions* rather than absolution – may be more likely to eliminate the "moral stains" that motivate prosocial behavior (Zhong & Liljenquist, 2006). If responses to moral transgressions are "scaffolded" on evolutionarily older mechanisms for removing physical contaminants (see Lee & Schwarz, 2011), then some element of physical cleansing may be needed to remove the psychological residue of such transgressions. Future research might profitably investigate such possibilities.

It is worth acknowledging some limitations of the present study. Following on from the above discussion, perhaps the major limitation is that our design did not enable us to clarify the mechanisms behind our effects. It would certainly be interesting to know whether, as a result of our manipulation, participants in the *Absolved* condition felt more positive or guilty than participants in the *Control* condition before donating. However, that would have required that we ask

participants these questions immediately before collecting the donation in each condition. As it stands, the Likert questions we administered were yoked not to our dependent variable (i.e., the donation) but rather to our experimental manipulation (i.e., absolution). (As we note above, the reason we included these questions was simply to encourage the effortful recall of committing and confessing the sin, respectively.) The upshot is that these questions were asked before the donation in one condition, and after the donation in the other – so responses are not comparable across conditions. In retrospect, it may have been better to use such questions to collect information about potential mechanisms, and to find some other means of encouraging participants to engage meaningfully in the recall tasks.

A second limitation concerns ecological validity. Although the recall paradigm we used is commonly employed in moral psychology studies (e.g., Jordan et al., 2011; Zhong & Liljenquist, 2006), we do not pretend that recalling the experience of Catholic confession is equivalent to undergoing the actual experience. It would be valuable to replicate our results in an ecologically valid setting. Such a study would, however, pose some formidable methodological challenges. For example, a between-participants design comparing Catholics who voluntarily attend confession with those who do not would preclude random assignment to conditions. This would restrict conclusions about causality: a positive relationship between confession attendance and prosocial behavior could reflect that confession promotes prosociality, that prosocial inclinations promote confession attendance, or that some third variable (e.g., a guilty conscience) promotes both prosocial and confessional tendencies (see Norenzayan & Shariff, 2008; Shariff & Norenzayan, 2007). Meanwhile, a within-participants approach (e.g., testing Catholics before and after leaving the confessional) would require administering the measure of prosociality twice. Nevertheless, it is possible that clever experimental design might circumvent these difficulties.

Assuming that our method at least approximates the experience of Catholic confession, an obvious question is how generalizable our findings are to absolution rituals beyond Catholicism. Many religions feature the concept of absolution, whether manifest in formal rites or not (e.g., *Prāyascitta* in the Hindu tradition and *Istighfar* in Islam). We look forward to future investigations of how rituals and practices of absolution impact on prosocial behavior in other religious traditions.

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Notes

1. A stronger conclusion is not possible here because participants were (understandably) not randomly assigned to different levels of religious ritual participation. It is thus possible that prosociality influenced ritual participation, or that some third variable influenced both (see Norenzayan & Shariff, 2008; Shariff & Norenzayan, 2007). We return to this issue in the discussion.
2. Recruitment was aimed solely at Catholic participants. Although 41 individuals responded to recruitment advertisements and were subsequently tested, 5 of these

participants identified themselves as non-Catholic (2 Protestant, 2 Atheist, 1 'Other') and were thus excluded from the analyses we report. However, the pattern of results was identical with these participants included.

3. This effect remained significant when the analysis was restricted to participants who had actually attended confession for the sin they recalled (i.e., excluding those who indicated they had only imagined confessing the sin).
4. Results were identical when gender was added to the model; gender itself was a non-significant predictor of donations.
5. We note in this context that the prosocial effect of recalling confession was stronger for participants who endorsed Divine judgment items, e.g., the belief that God will punish sinners and the belief that Hell exists (see Table 2).

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