

# A sacred commitment: How rituals promote group survival

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Religious groups have survived for thousands of years despite drastic changes in society. One reason for their successful survival is the proliferation of group rituals (i.e. meaningful sequences of actions characterized by rigidity, formality, and repetition). We propose that rituals enhance religious group survival not only by signaling external commitment but also by fostering internal commitment toward the group in three ways: (1) enhancing belief in the group's values ('committed cognition'), (2) increasing the desire to maintain membership in the group ('committed affect'), and (3) increasing contributions to the welfare of the group ('committed behavior'). We conclude with a call for new empirical research on how participating in rituals can enhance internal commitment toward one's group (116/120).

## Addresses

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## Introduction

Despite changes to society, emerging technologies, and economic activity, religious groups have stood the test of time. More than half of the world identifies as either Christian, Muslim, or Hindu; each of these groups has existed for thousands of years. The persistence of these religious groups suggests that there might be something psychologically distinct about them and their attendant behaviors compared to other groups and societal institutions. Offering one possible explanation, scholars have argued that collective rituals provide the fundamental mechanism of keeping groups intact [1–4]. Indeed, some prominent researchers have even included ritual in their definition of religion. As one example, Lawson and McCauley [5] define a religious system as a “symbolic-cultural system of *ritual* acts accompanied by an extensive and largely shared conceptual scheme . . . ” (p. 5; emphasis added).

Starting with a formal definition, rituals are predefined sequences of action characterized by rigidity, formality, and repetition that are embedded in a larger system of symbolism and meaning [6]. Compared to habits or conventions, which may change each time they are performed, rituals require specific physical features (e.g. rigid, repetitive action sequences) and psychological features (e.g. meaningfulness) [7,8,9–11]. Religious groups often have meaningful and elaborate rituals, from Catholics performing the Sign of the Cross to Jews having Passover Seder.

But by what socio-psychological mechanisms do rituals hold religious groups together? The current article proposes a new framework to identify and understand how engaging in collective rituals can promote group survival as explained at the level of *individual* psychology (see Figure 1). We conclude with several promising new avenues for future research based on this framework.

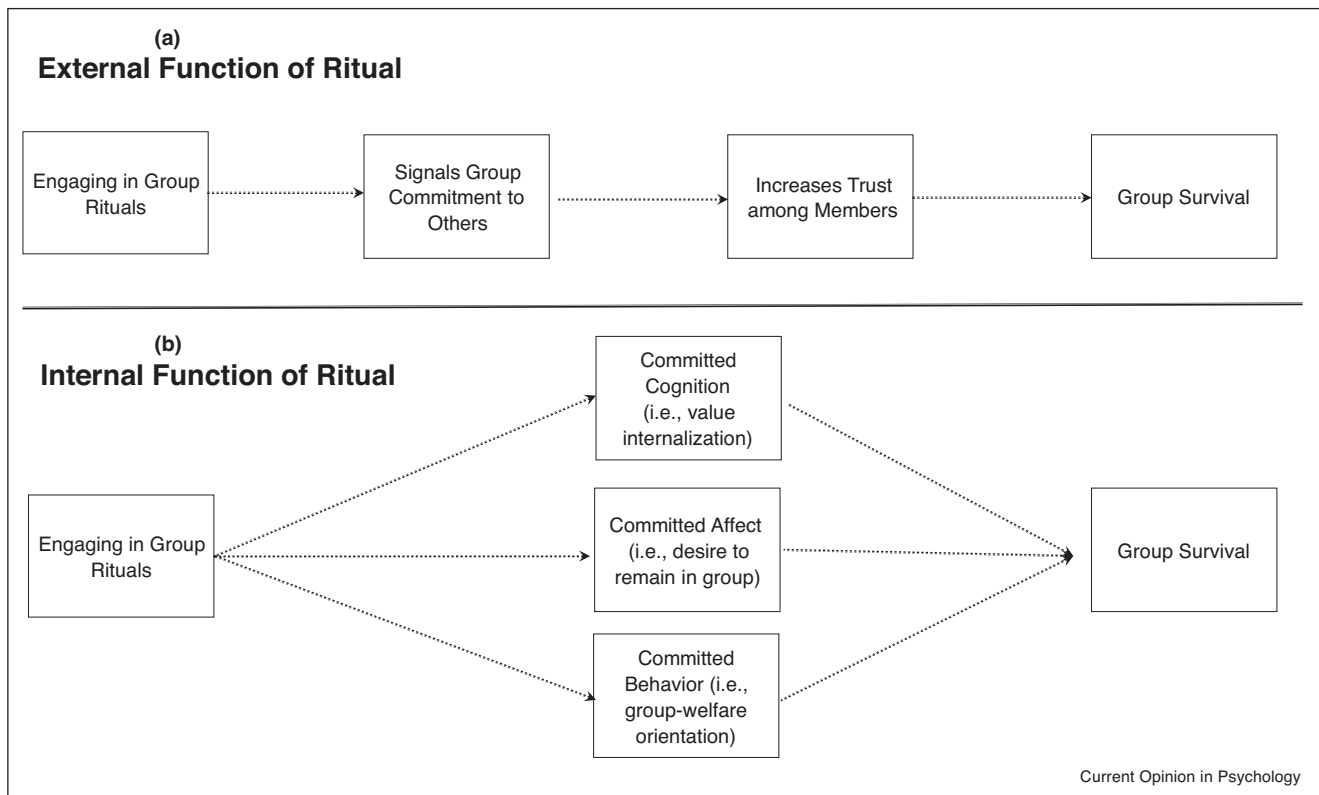
## Rituals increase internal commitment

Prior work indicates that a primary function of collective rituals is to *signal* that the ritual-performers are committed to the group [12–16]. This function of *signaling commitment* is based on the idea that it is costly to perform rituals (due to the time, effort, and/or resources they require), making their performance a stronger signal of commitment toward a group than verbal expressions, which are susceptible to deception [17–21]. The costliness of rituals ensures that only those individuals who are devoted to the group will participate in the ritual, distinguishing cooperators from defectors and ultimately fostering trust among members [22,23].

Here, we present evidence that in addition to this external signaling function, group rituals also serve the function of increasing the ritual-performer's *internal commitment* (i.e. the strength of an individual's attachment to their group). Thus, even performing a ritual alone with no one watching, when it has no signaling power, still enhances the performer's internal commitment to their group. Precedent for our proposition comes from Sosis [24], who discusses the practice of performing private rituals as a *self-signaling* mechanism that convinces the ritual-performer that (s)he believes in group doctrine (see also Ref. [3]). But beyond that, the effect of rituals on internal commitment has been largely overlooked; as one researcher [25] once wrote, ‘Commitment is useless unless it is successfully communicated’ (p. 120).

Our theory proposes that internal commitment is far from useless. Moving beyond signaling theory, we make the

Figure 1



An integrative theoretical model of the consequences of performing rituals for group survival.

Note. Panel A depicts the external function of ritual: rituals serve as hard-to-fake signals of an individual's commitment to the group, fostering trust among members, and ultimately facilitating the emergence of group cooperation and survival. Panel B depicts the internal function of ritual: performing a ritual increases the performer's cognitive, affective, and behavioral commitment to the group, which, in turn, facilitates group survival. Altogether, our integrated theoretical model proposes rituals serve both an external and internal function, promoting group survival.

following propositions: (1) ritual is a vehicle for not just signaling external commitment but also enhancing internal commitment in religious groups and (2) internally committed members are critical for a group's survival. We further propose that there are three indicators of internal commitment: (1) a belief in and acceptance of the group's values (*committed cognition*); (2) a desire to maintain membership in the group (*committed affect*); and, (3) an orientation to contribute to the welfare of the group (*committed behavior*) [26–29]. While all three indicators involve felt attachment toward a group, they represent different pathways by which the attachment can be expressed.

Below, we review evidence that performing group rituals increases the three indicators of internal commitment. Altogether, our account suggests that performing rituals both signals commitment to others (an external function) and increases the performer's internal commitment (an internal function), which facilitates cooperative group behavior and ultimately enhances the survival of the group [30].

### Rituals promote value internalization ('committed cognition')

Group rituals represent the group's value system [31] through at least two means. First, rituals' physical features (formality, rigidity, and repetition) provide an effective method for standardizing and transmitting the values that rituals represent, enabling large numbers of people to practice the ritual using the same procedure and thus to express the same values [32]. For example, Muslims pray facing Mecca five times a day at prescribed times through ritualistic prayer sequences called Salat (or Namaz). Salat serves to unite all Muslims across the planet through a daily devotion to Allah. Second, because rituals physically represent group values, enacting rituals reminds the performers of the meaning behind the ritual (the groups' core values), promoting value internalization. For instance, participating in religious rituals leads ingroup members to view their group's values as sacred [33], demonstrating a direct link between rituals and the internalization of group values [34].

To understand how rituals come to symbolize group values, researchers have proposed the theory of causal opacity [35]. Rituals often contain arbitrary sequences of behaviors that lack apparent instrumentality and are thus causally opaque (e.g. washing hands many more times than hygiene requires) [36]. As a result, people imbue these arbitrary physical behaviors with social norms, making them representative of the group's values [37]. For example, the Catholic Sign of the Cross simultaneously symbolizes group values to in-group members while also appears meaningless to out-group members who might be confused by the gesture's purpose.

#### **Rituals create a desire to remain in the group ('committed affect')**

Scholars across disciplines have long argued that rituals lead to a shared emotional experience that connects individuals to the collective, fostering a willingness to remain in the group. Durkheim [1] claimed that rituals produce a state of 'collective effervescence' (i.e. a feeling of belonging and assimilation) that bonds group members together and produces a feeling of membership [38]. Additionally, Ritual Modes theory proposes that low frequency, high arousal 'imagistic' rituals (e.g. the 16 Samskaras in Hinduism) are especially likely to bind individuals to the group because these rituals produce salient and memorable imagery, producing fusion among those who have shared the same experiences [39].

For instance, Catholics participating in the pilgrimage of the Way of Saint James (also known as Camino de Santiago) who engaged in more ritualistic behaviors (e.g. wore distinctive clothes such as the scallop shell, left stones on the road) reported a stronger visceral feeling of oneness with the group after the pilgrimage finished — feelings which persisted three months later [40\*].

Recently, researchers have focused on how one physical feature of ritual — synchrony (i.e. the matching of actions in time with others)—can foster group bonding and a desire to remain in the group. In particular, synchronous actions, such as Jewish congregants reciting the Shema in unison, can blur the boundaries between the self and other, direct attention to the actions of group members, and release reward-inducing hormones such as endorphins, all of which increase attachment to the group [41–46].

In addition, individuals of different Christian denominations from the United Kingdom and Brazil reported more emotional ingroup attachment after (versus before) participating in a synchronous religious ritual [47]. In another study, engaging in holiday rituals (e.g. Christmas) with others (versus alone) enhanced feelings of closeness, leading to more holiday enjoyment [48]. Altogether, this research suggests rituals can foster a sense of attachment

to other group members and the group as a whole, producing a desire to remain in the group.

#### **Rituals foster a group-welfare orientation ('committed behavior')**

Last, collective rituals facilitate 'committed behavior' — an orientation for altruistic behaviors on behalf of the group. The devoted actor hypothesis proposes that actors are willing to engage in extreme and costly behaviors to protect their sacred values [49]. Thus, group rituals —as physical representations of sacred group values [50]—can motivate a desire to contribute to the group. For instance, researchers have demonstrated that participation in collective rituals (across a diverse range of religious groups) is positively related to support for a specific and extreme example of self-sacrifice: willingness to die for the group [51].

In another set of experiments [52\*] conducted across numerous religious groups (Christians, Muslims, Jews), altering more ritualistic group activities evoked greater punishment of the activity-alterer, suggesting violating rituals can motivate a desire to punish ingroup deviants. For example, in one study, Jewish and Muslim participants read a social media message from an individual who either advocated altering religious circumcision ceremonies (by requiring them to be performed in a hospital by a medical professional) or advocated leaving circumcision ceremonies unaltered. Jewish (versus Muslim) participants felt relatively greater moral outrage and consequently recommend harsher punishment for individuals advocating that circumcision be performed in a hospital, presumably because the Jewish circumcision ceremony is more ritualistic (e.g. sequenced and formal) than the Islamic circumcision ceremony. These results suggest that altering a ritual is seen as a moral violation of protecting and upholding group values. Similarly, rituals lead to more value-defensive and zealous behaviors (e.g. giving one's life for one's religious beliefs) especially in the face of anxious uncertainty and threats [53].

#### **Internal commitment increases the likelihood of group survival**

Performing religious rituals not only enhances group members' internal commitment by increasing their committed cognition, affect, and behavior, but it also enhances their group's likelihood of survival. This Section 'Internal commitment increases the likelihood of group survival', we show how each aspect of internal commitment (cognition, affect, behavior) work in concert to promote group survival.

#### **Internalization of group values ('committed cognition') and group survival**

Groups with higher value internalization may survive longer for at least three reasons. First, apparent similarities in values and beliefs serve as kinship cues [54], and

individuals provide more assistance to kin than to non-kin [55]. Second, having aligned values helps group leaders to coordinate the activities of large numbers of people by fostering a greater sense of interdependence [56,57]. For instance, the Catholic Pope is able to coordinate the behaviors of over one billion Catholics (e.g. influencing daily life, such as marriage, family life) by unifying this large group of people around Church doctrine. Finally, shared group values can enhance trust, align individual moral convictions, and ultimately regulate the behavior of individuals in a group. As a result of this behavioral regulation, social order is maintained, and group survival is enhanced [58].

#### **Desire to remain in the group ('committed affect') and group survival**

Groups are vulnerable to exploitation by 'free-riders' — individuals who receive the benefits of group membership (e.g. protection, access to mates, resources) without engaging in reciprocal exchange and providing benefits to the group [59,60]. As a result, mis-categorizing a potential new member of a group as being a cooperator when they are in fact a free-rider, or free-rider when they are a cooperator, is very costly for groups and threatens group stability [61]. For instance, asking a new church member to lead a weekly prayer becomes problematic if the member continually fails to fulfill their duties or leaves the church. Thus, groups whose members desire to remain in the group ('committed affect') experience more stability and a greater likelihood of survival because the opportunities for free-riders to enter the group are minimized. Furthermore, if free-riders do enter the group, they may be more readily ascertained due to their failure to perform the group's costly rituals (signaled commitment).

Although outside of the religious context, several demonstrations of the importance of committed affect in group survival come from organizational studies. These studies show that employee turnover (i.e. employees' voluntary severance of employment ties) disrupts productivity-related outcomes, reduces financial performance, and ultimately undermines survival of the organization [62]. Analogously, religious groups with high turnover will fail to operate productively to achieve their goals.

#### **An orientation to contribute to group welfare ('committed behavior') and group survival**

Most groups and religious groups in particular are structured such that the benefits of group membership accrue to everyone in the group, regardless of whether they contributed to the group or not [61]. For instance, all Catholics are welcome to partake in communion even if they do not donate to the church. As has been shown using the public goods economic game, unless there is a mechanism to punish free-riders, player contributions eventually dwindle to almost nothing, resulting in the

collapse of the group [63]. Punishments of free-riders are more frequent and harsher when the group members are committed to contribute more to the group's welfare. Such groups have higher levels of intragroup cooperation and greater survival chances [64].

During intergroup conflict, the need for all members to have a group-welfare orientation is especially high. The ongoing religious and cultural conflict between Jewish Israelis and Palestinians over the holy land is one such example in which both cultures require deeply committed citizens willing to die on behalf of their group. Studies show that more committed group members engage in both stronger defense of their own group and more aggression toward the opposing group during conflict, thus enhancing their group's likelihood of survival [65,66].

#### **Conclusions**

Many religious groups have persisted for an extraordinarily long time, outlasting institutions and dynasties. While several scholars have concluded that ritual is the glue that holds these groups together, the psychological mechanisms by which rituals enhance group survival have been underexamined. Here, we propose a new model which accounts for how rituals serve such a critical function in religious group longevity: performing rituals not only allows group members to *externally* signal their commitment to the group [12–16] but also fosters their *internal* commitment. Hence, a religious group's persistence and success stems from its "members" shared commitment to the group that comes from participation in ritual.

We identify several fruitful avenues for future research. First, it is possible to empirically disentangle the internal and external function of ritual. If rituals only signal commitment, their performance must be observable and impose some cost on the performer in order to affect group survival [3,15]; in contrast, our model predicts that even privately performed and costless rituals can enhance group survival. Thus, future research could isolate the internal function of ritual from its external function by examining contexts when the ritual is privately performed or involves minimal costs (e.g. private versus public prayer). Future research could also investigate the internal function of ritual by directly measuring self-reported feelings of commitment [29,67]. Second, another direction for future research is testing whether the physical or psychological components of ritual are more important to its internal or external function. While performing a meaningful ritual might be more important in enhancing internal commitment, performing physically rigid or even flamboyant ritual actions might be more important for signaling commitment. If so, then it is possible that people engage in costly public rituals, such as a long funeral procession, for the primary purpose of signaling their commitment to others (showing others their grief at



a group member's death) but then engage in separate private rituals (praying later at home alone) that are more meaningful to them and reinforce their internal commitment (honoring the dead group member silently in one's heart) [68]. Moreover, the private rituals that group members perform may not even be culturally mandated or may have unique idiosyncratic features, yet they could still enhance commitment to the group. Consider the Christian whose morning prayer is combined with meditation and yoga — a non-sanctioned yet still personally meaningful ritual. A group member who is just 'going through the motions' of a ritual in public, thus performing a physically intact but psychologically empty ritual, may even require a private deeply meaningful ritual to re-ignite their internal commitment. Future work could examine the interplay of public and private rituals, and the role of each, for maintaining group commitment.

Finally, the current paper's proposal highlights a concerning implication for the modern world. As secularism and atheism are growing in the Western world [69], the question emerges of whether Western religions will be able to maintain their competitive advantage without the rituals that hold them together. Relatedly, will modern secular groups be able to cultivate meaningful rituals as religious groups have done, as a way to promise long-term future success? Secular groups may be wise to take their cues from religious groups and strengthen their group rituals. Rituals, by enhancing members' commitment to their groups, are the mechanism by which groups—religious or otherwise—persist throughout time.

### Conflict of interest statement

Nothing declared.

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