

A Sheep in Wolf's Clothing? Toward an Understanding of the Religious Dones

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People often favor their ingroup and derogate members of the outgroup. However, less is known about “religious dones,” who used to identify as religious but no longer do and have more transitional identities. Across six studies ($N = 5,001$; four preregistered), we examined the affiliative tendencies of religious dones and how they are perceived by other religious groups. In Study 1, using a Cyberball paradigm, religious dones included atheist targets relative to Christian targets. In Studies 2 and 3, currently religious participants demonstrated an attenuated tendency to commit the conjunction fallacy (i.e., associating people with heinous acts of violence) for religious dones compared to never religious targets. In Study 4, using a behavioral sacrifice paradigm (e.g., reducing compensation to reduce an uncomfortable noise blast to a partner), religious dones favored never religious partners (who did not reciprocate) and did not sacrifice as much for currently religious partners (who sacrificed for them as a member of their ingroup). Studies 5 and 6, investigating belief and identity, revealed that religious dones hold favorable attitudes toward other dones (and former believers) and the never religious (and never believers), whereas other groups view dones “in the middle.” We also identified mediating mechanisms of trust, ingroup identification, and belief superiority. Taken together, these six studies suggest that religious dones are viewed as “a sheep in wolf’s clothing,” in which they are treated favorably by currently religious individuals but often prefer never religious individuals, even though that warmth is not consistently reciprocated.

Keywords: religious, religion, group affiliation, formerly religious, nonreligious

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Beware of the false prophets, who come to you in sheep’s clothing,
but inwardly are ravenous wolves.

—Matthew 7:15, *New American Standard Bible*

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The concept of “a wolf in sheep’s clothing” has long been used to describe seemingly duplicitous people who outwardly appear religious (i.e., a sheep) but are inwardly opposed to a group’s religion (i.e., a wolf) and may be motivated to mislead people from that religious group. People are warned not to be deceived by those who appear externally to be one way but are secretly another—be wary of the religious person who is furtively nonreligious. But what is to be made of people who have “left the fold” and no longer identify as religious—people known as religious “dones” (Van Tongeren, DeWall, Chen, et al., 2021)? How are religious dones viewed by previous coreligionists, as well as those who have never been religious? And how do religious dones view those who hold the identity they once held (i.e., currently religious individuals) or those who identify in ways that more closely align with their current expressed identity (i.e., never religious individuals)? Given the central role of identity in group-related attitudes and behavior, it is important to understand how religious dones perceive and are perceived by other religious identity groups.

Leaving Religion

The number of people leaving religions is steadily escalating. Recent national polling data suggest that people are de-identifying

from religion in growing numbers, with the number of Christians in the United States decreasing and the number of religiously unaffiliated people growing (Pew Research Center, 2019). Nonreligious individuals currently comprise the third largest religious affiliation in the United States, and other parts of the world are similarly seeing an increase in religious disaffiliation (CNN, 2019; Gallup, n.d.). Some other work estimates that nearly one third of individuals may switch religious identifications (Loveland, 2003). Although there might be particular “risk” periods for religious deidentification, such as early or emerging adulthood (Uecker et al., 2007), both religious switching and religious deidentification can occur throughout one’s life (Suh & Russell, 2015). That is, many people have transitional religious identities—moving in and out of religious identification over their life. Despite this growing trend of changing religious identities, including an increasingly high rate of people no longer identifying as religious, little is known about how such individuals conceptualize their religious identity in relation to other relevant religious identities.

How do people view themselves in such transitional religious identity categories? Consider someone who was raised in a religious home, integrated a core set of religious beliefs, and adhered strongly to deeply held religious convictions. However, over time, their perception of themselves as “religious” begins to wane, and they eventually no longer identify as religious. Being religious once comprised a significant part of their self-concept yet it now is no longer central to their sense of self. Who is their ingroup? Might they still consider religious individuals—with whom they had a strong and enduring connection for much of their life—part of their ingroup? Or would they begin to more strongly identify with other nonbelievers, either other fellow de-identifiers or perhaps those who were never religious? Would they rely on the past (e.g., religious community), the present (e.g., other formerly religious individuals), or the promise of the ideal (e.g., never religious community)? Depending on why they no longer identify as religious, religious dones may view never religious individuals with admiration: Such individuals never identified with a religious system that is no longer useful or descriptive to religious dones.

In a parallel yet distinct vein, how might such dones be viewed by others? People may de-identify from religion for numerous reasons (see McLaughlin et al., 2020), and many religious dones still engage in religious or spiritual practices despite no longer identifying (Van Tongeren, DeWall, Chen, et al., 2021). A recent theoretical model suggests that people may deidentify from religion across the four dimensions of religion (cf. Saroglou, 2011): disbelief from belief, disengagement from bonding, discontinuing from behaviors, and disaffiliating from belonging (Van Tongeren & DeWall, 2021). Someone may deidentify from one or more dimensions but need not deidentify from all, while still considering themselves formerly religious. For example, some may still (privately) believe in supernatural agents but no longer find the label of “religious” helpful, perhaps because of negative associations with religion, because of frustration or disappointment with religious people or institutions, or because personal growth, development, or evolution has expanded beyond the label of religious. Thus, for some religious dones, the identity itself is a label that lacks clarity or could mean many things. Some religious dones may feel caught between two identities: a previous religious identity that once felt comfortable but no longer fits and a current identity of not identifying as religious that appears much more like

those who were never religious at all. That is, they are situated in a transitional space. Religion provides people with a coherent social identity (Ysseldyk et al., 2010), but little existing research has examined the identity of religious dones: those who once identified as religious but no longer do so. The current research sought to fill this gap in the literature by examining how people with stable versus transitional religious identities are viewed by and treat each other by specifically focusing on religious dones.

Religion as a Powerful Social Identity

A long line of research highlights how one’s social identity affects a wide range of cognitions, emotions, and behaviors, including how they view and treat others (Hornsey, 2008). For example, social identity theory posits that identification with a social category shapes how people view themselves and others in references to that category (Hogg, 2006). Previous theorizing reveals that individuals favor their ingroup and show prejudice toward outgroup members (Brewer, 1999). Group membership is defined cognitively by each individual, based on their own conceptualization of whether they were included within a self-defined identity. Based on their identity in a particular group, individuals tend to favor the ingroup and derogate members of the outgroup. Religious identity is a particular social category with which people regularly identify (Hogg et al., 2010; Ysseldyk et al., 2010).

People construct their identities based on a variety of social constructs and group affiliations. Some of these identities may be more fixed and enduring (e.g., viewing oneself as a person of Asian descent), whereas others may be more malleable and could be more temporary (e.g., viewing oneself as a student). For some, religious identity may be more malleable or changeable. Research has found that religious identity forms across multiple stages (LeDrew, 2013), highlighting that as these identities are formed (or changed), some religious identities are considered “softer” or more liminal (Lim et al., 2010). To the degree that religious dones occupy a space between currently religious individuals (many of whom have been stably religious) and never religious individuals (who have been stably nonreligious), they may have softer identity boundaries (see Kosmin & Keysar, 2007). As they move away from one religious identity to another, their views of themselves and others, in relation to this salient dimension of their identity, may differ from others who share their explicit identity. That is, although religious dones and never religious individuals may both report being nonreligious, how they view their group affiliation—and their subsequent treatment of other people across the religious identity spectrum—may be notably different.

Religious individuals often show an ingroup bias (Johnson et al., 2012). This ingroup bias is enhanced for individuals who identify more strongly with their religious group (Cairns et al., 2006). Still, religious prejudice against outgroup members occurs across the religious spectrum, including those high and low in religious fundamentalism (Brandt & Van Tongeren, 2017). Indeed, research typically identifies a broader ingroup bias: People generally like and act kindly toward members of their ingroup (Brewer, 1999; Hogg, 2006). However, prior work has not identified who the ingroup would be for religious deidentifiers and therefore what pattern of group affiliation they would demonstrate. Specifically, would religious dones continue to show ingroup favoritism toward currently religious people because they once shared a common

group identity, or would they favor never religious individuals, who may outwardly express behaviors and practices more aligned with their present identification? And how might others view individuals who have left religion?

Religious Deidentification and the Religious Residue Effect

Prior research on religious identity has failed to properly disambiguate nonreligious individuals. Work that examines the role of religion, specifically research that treats religion as a binary category (religious or nonreligious identities), does not fully capture the rich variation of people who might identify as nonreligious. For example, those with nonreligious identities includes both those who have never been religious and those who were at one time religious but no longer identify as religious. Recently, a line of research has examined the psychological consequences of *religious deidentification*, or the process of no longer identifying as religious. Comparing individuals of varying religious identities in four different cultures, researchers found that religious psychology tends to persist following deidentification (Van Tongeren, DeWall, Chen, et al., 2021). Namely, religious dones report religious attitudes, practices, and behaviors that more closely resemble currently religious individuals than do never religious individuals across explicitly and implicitly assessed variables and behavioral criteria (e.g., donation behavior, volunteering). Often times, this evidences as a stairstep pattern in which religious dones fall between the currently religious and never religious individuals' responses. This suggests that even when someone stops identifying as religious, remnants of their religion remain, exerting a residual effect on how they think, feel, and act.

Why might this residue persist? Prior work has suggested three possible routes (and we acknowledge there are likely other avenues): cognitive, behavioral, and social. First, we see cognitive explanations: Because religion operates as a schema (McIntosh, 1995) and schemas are notoriously resistant to change, religious dones may rely on lingering cognitive patterns of their previous religion and engage in schema-consistent processing, even though they no longer identify as religious (see Van Tongeren, DeWall, Chen, et al., 2021). Second, there may be behavioral factors: Many religions include ritualized behaviors that may become habitualized over time; these habits operate as implicit knowledge structures (Aarts & Dijksterhuis, 2000) upon which people continue to rely even after their self-identified religion changes. Third, social features may play a role: Religious dones may continue to frequently interact with religious individuals, which has been shown to play a role in persistent residual effect on their moral judgments (Van Tongeren, DeWall, Hardy, & Schwadel, 2021). Thus, there are numerous plausible pathways by which religion may retain a residual effect.

Other work has confirmed this religious residue effect in different domains. DeWall and Van Tongeren (2022) report three studies that reveal this association in consumer behavior for religious products (e.g., willingness to spend money on religious items). Religious dones appear to be spending money similar to currently religious individuals, suggesting that changes in heart move more quickly than changes in one's pocketbook. Still other research has found this religious residue pattern in moral judgments, among both adults and adolescents (Van Tongeren, DeWall, Hardy, &

Schwadel, 2021). Examining the endorsement of moral foundations, this work has found that religious dones make moral judgments somewhere in between currently religious and never religious individuals. Notably, those researchers also found evidence that this residue effect may decay over time (in the adolescent sample) as the strongest residue effects were found among those who had most recently deidentified and weakest among those who left religion further in the past. Related to this, other research has distinguished different patterns of endorsing personal values among the currently religious, religious dones, and religious nones (Schwadel et al., 2021).

What role, if any, might this religious residue effect play in intergroup perception? That is, would religious dones still favor currently religious individuals, seeing them as ingroup members? Or would their shift in identity reflect a similar shift in identity categorization and thus group affiliation? It is possible that changing one's social identity, which is (for many) an overt social category, may bring about immediate changes to how they view themselves and others (i.e., act like never religious individuals). Formerly religious individuals may look back at their former selves, and the currently religious individuals who resemble these selves, with more distance and disdain than the never religious individuals they now more closely resemble. Temporal self-appraisal theory (Wilson & Ross, 2001) provides some support for this view. The theory highlights how people demonstrate a tendency to perceive themselves as though they are constantly improving, in part by derogating past versions of themselves—especially ones that feel particularly distant (Ross & Wilson, 2003). Alternatively, it is also possible that similar to other religion-related processes, religious dones would show evidence of religious residue and act in ways that are closer to currently religious individuals than their never religious counterparts demonstrate (i.e., in the middle). Moreover, we suspect that religious dones may be perceived differently by others; would religious individuals still see them as somewhat religious, or would they view them as outsiders who left the ingroup? And how might never religious individuals view a once religious person who no longer identifies as such? We sought to explore how religious identity affected group perception and affiliation across a series of empirical studies.

Overview and Hypotheses

We intended to examine two primary research questions based on the attitudes dones hold and the perceptions others hold of dones. First, we sought to explore the affiliative tendencies of religious dones; specifically, we examined how religious dones view themselves and other religious groups. Little work has explored the intergroup affiliative patterns of religious dones, and our predictions were framed by the religious residue hypothesis: Formerly religious individuals' attitudes and behaviors would more closely resemble currently religious individuals than the never religious do.

Second, we sought to examine how religious dones are perceived; specifically, we tested how other religious groups—namely, currently religious and never religious individuals—perceive and treat religious dones. Given that religious dones have experienced a transition in their identity, we investigated how those who once shared an identity (i.e., currently religious individuals) and those with whom they may appear outwardly to be most similar to (i.e., never religious individuals) may perceive and treat

religious donees. We had no a priori predictions about how religious donees would be perceived.

Studies 1 and 4 examined behavioral tendencies, whereas Studies 2–3 and 5–6 examined perceptions. In particular, Study 1 was an initial examination of the group affiliation tendencies of religious individuals compared to formerly religious individuals using a behavioral exclusion paradigm. In Study 2, we preregistered our hypotheses (<https://osf.io/3s7mc/>), and we directly compared the three religious identity groups on an indirect measure of prejudice (the conjunction fallacy). Study 3 intended to replicate the findings of Study 2. In Study 4, we preregistered our hypotheses (<https://osf.io/fqgzc/>) and employed a behavioral sacrifice paradigm. In Study 5, we preregistered our study (<https://osf.io/u7b9t/>) and examined perception of individuals varying in both identity and belief on measures of prejudice, trust, ingroup perception, and dehumanization, as well as identified potential mediating mechanisms. In Study 6, we preregistered our study (<https://osf.io/m7kfa/>) and sought to replicate many of the findings of Study 5. Study 1 was approved by the third author's institutional review board, and Studies 2–6 were approved by the first author's institutional review board ("Understanding the Nature and Consequences of Religious Deidentification," Protocol 5c58b9b688739).

Previous research has found small effects for religious residue research (see Van Tongeren, DeWall, Chen, et al., 2021; Van Tongeren, DeWall, Hardy, & Schwadel, 2021). Toward that end, a power analysis revealed that to detect an effect size of .20 with .80 power with an alpha of .05, we would need 277 participants for Study 1 and 400 participants for Studies 2–6. Study 1 included data from 353 participants, Study 2 sampled 957 participants, Study 3 sampled 945 participants, Study 4 sampled 900 participants, Study 5 sampled 1,035 participants, and Study 6 sampled 905 participants.

Study 1: Social Inclusion or Exclusion

Study 1 used archival data to investigate behavioral religious intergroup bias among participants who are formerly religious, currently religious, and never religious. Ingroup preference was measured using a virtual ball tossing game (i.e., Cyberball), designed to assess objective behaviors involving affiliation/exclusion toward targets identified as atheist, Christian, and unknown religious affiliation. This task provided the opportunity to investigate participants' differential treatment toward three simultaneous targets who differed in religious identity.¹ We predicted that religious donees' affiliative tendencies would more closely resemble the currently religious than the never religious.

Method

Participants

Data were pooled from three studies using identical recruitment strategies: Study 1a ($n = 84$; December 2013), Study 1b ($n = 82$; January 2014), and Study 1c ($n = 187$; June 2014). Participants were workers on Amazon Mechanical Turk who were paid \$0.70 for participating in a study described as investigating attention. Location was restricted to the United States, and only complete responses were analyzed. We focused our analyses on participants belonging to three religious identities: Currently religious are

those who grew up and still identify as one of the main religions ($n = 147$). Religious donees are those who grew up as one of the main religions but currently identify as agnostic or atheist ($n = 116$). Finally, religious nones are those who grew up and currently identify as agnostic or atheist ($n = 40$). Because this study was designed to test different research questions, the sample size for the current study was not determined a priori but only by the available number of nonreligious participants in the subsample. A total of 58.4% were women ($M_{\text{age}} = 37.4$, $SD_{\text{age}} = 13.8$). Most participants identified as White/Caucasian (83.2%), and the remaining participants were Asian (5.9%), Black/African American (8.3%), American Indian (0.7%), or Hawaiian (0.7%); four participants did not report their race); 8.3% identified their ethnicity as Hispanic.

Procedure and Measures

As described in more detail in Van Cappellen et al. (2017) and Van Cappellen and LaBouff (2019), participants played an online Cyberball game in which they tossed an on-screen ball with three other "players" (Cyberball 4.0; Williams et al., 2012). The Cyberball game was adapted to measure intergroup affiliation and exclusion as used by Degner et al. (2007). While the participant's religious affiliation was not displayed (information collected only at the end of the survey), the identities of the three players were manipulated to always include an atheist, a Christian, and a neutral player. Participants were told as part of our cover story that we were partnering with a study on walking groups and were shown a list of many walking groups. Participants then happened to be doing the game with a member of an atheist walking group, a member of a Christian walking group, and a person who does not participate in walking groups (unknown religious affiliation). These three bogus players were controlled by the computer and threw the ball randomly between players, including the participant. Critically, each time the participant threw the ball, the identity of the target player was recorded. A total of 30 throws were exchanged, with the participant throwing the ball at least seven times.

In line with Van Cappellen et al. (2017, Van Cappellen & LaBouff, 2019), we analyzed each participant's first six throws (scores ranged from 0 to 6 for each of the three targets) in order to be able to observe fair behavior (i.e., throwing the ball twice to each of the three players) instead of forcing bias. As in previous publications, we also removed participants who incorrectly answered a manipulation check question assessing participants' knowledge of the other players' identity immediately after the game. We used this criterion to reduce the possibility that participants in our final sample simply clicked through the task without paying any attention to it. A total of 44 participants failed this manipulation check, resulting in a final sample size of 259 participants.

At the end of the survey, participants also answered two religious identity questions that we used to create our groups of

¹ Aspects of these data have been reported on elsewhere. Van Cappellen et al. (2017, Study 3) focused on a sample that excluded participants who identified as atheist or with a religion other than Christianity. They found that individual differences in religiosity predicted ingroup favoritism and in religious fundamentalism predicted both ingroup favoritism and outgroup derogation. Van Cappellen and LaBouff (2019, Study 1) focused on two nonreligious identities and found that both atheists and agnostics showed evidence of discrimination toward the Christian target. However, both publications did not take into account participants' history of religious affiliation, which is the purpose of the present reanalysis of these data.

interest. Participants had to first report their religious affiliation (“What is your religious affiliation?”; response options were Catholic, Protestant, Muslim, Buddhist, Jewish, agnostic, atheist, and other; or open-ended response in Data Set 3) and then the religious affiliation they grew up in (“In which religious affiliation did you grow up?”; response options were Catholic, Protestant, Muslim, Buddhist, Jewish, agnostic, atheist, and other). Because participants sometimes selected the “other” response option and then specified a religious group (e.g., Christian), we also used that information to classify participants in our three groups. Participants with missing data in one of the questions could not be classified and were not part of the sample.

Results

See Figure 1 for means and standard errors for the number of throws that were directed toward each target as a function of the participant’s religious identity. First, an omnibus mixed analysis of variance (ANOVA) with the number of throws to each target as a within-subject factor and participants’ religious identities (coded as religious = 0, formerly religious = 1, never religious = 2) as a between-subjects factor showed a significant interaction between the two factors: The assumption of sphericity was violated, so the Greenhouse-Geisser correction was applied, $F(3.76, 480.77) = 7.53, p < .001, \eta_p^2 = .056$.

To plot this interaction, we first tested the simple main effects of participants’ religious identity. For each religious identity (i.e., separately for currently religious, formerly religious, and never religious), we ran a one-way repeated-measures ANOVA on the three scores, followed by pairwise comparisons with a Sidak correction. For currently religious participants, there was no statistically significant difference in behavior toward the three targets, $F(1.87, 230.34) = 1.94, p = .148, \eta_p^2 = .016$. For the religious dones, there was a significant difference, $F(1.74, 173.72) = 9.77, p < .001, \eta_p^2 = .089$, such that they threw the ball less often to the Christian player than to the atheist player ($M_{\text{diff}} = .81, 95\%$ confidence interval of $M_{\text{diff}} [.29, 1.33], p = .001$) and than to the neutral player ($M_{\text{diff}} = -.41, [-.77, -.04], p = .025$). They also threw the ball more often to the atheist player compared to the neutral player, although this difference was only marginally significant ($M_{\text{diff}} = .41, [-.35, .85], p = .080$). For the never religious participants, there was also a significant difference, $F(2, 66) = 5.51, p = .006, \eta_p^2 = .143$, such that they threw the ball less often to the Christian player compared to the atheist player ($M_{\text{diff}} = 1, [.21, 1.80], p = .010$) and to the neutral player ($M_{\text{diff}} = .77, [.10, 1.43], p = .020$). However, there was no difference between the atheist and neutral target ($M_{\text{diff}} = .24, [-.67, 1.14], p = .887$).²

Then, we tested the simple main effects of the targets. We ran a one-way ANOVA on the number of throws toward each of the three targets comparing between participants’ identity, followed by pairwise comparisons with a Sidak correction. Regarding the Christian target, there was a significant difference in the behavior among the three participants’ religious identities, $F(2, 258) = 11.12, p < .001, \eta_p^2 = .08$, such that the currently religious threw them the ball more often than the formerly religious ($M_{\text{diff}} = .52, 95\%$ confidence interval of $M_{\text{diff}} [.20, .84], p < .001$) and the never religious ($M_{\text{diff}} = .70, [.24, 1.16], p < .001$). However, the formerly and never religious did not differ from each other ($M_{\text{diff}} = .18, [-.29, .65], p = .726$). Regarding the atheist target, there was

a significant difference in the behavior among the three participants’ religious identities, $F(2, 258) = 8.78, p < .001, \eta_p^2 = .064$, such that the currently religious threw them the ball less often than the formerly religious ($M_{\text{diff}} = -.54, [-.88, -.21], p < .001$) and the never religious ($M_{\text{diff}} = -.55, [-1.03, -.06], p < .001$). Again, the formerly and never religious did not differ from each other ($M_{\text{diff}} = -.01, [-.50, .49], p = 1$). Regarding the neutral target, there was no significant difference in the behavior among the three participants’ religious identities, $F(2, 258) = .59, p = .556, \eta_p^2 = .005$.

Discussion

Study 1 tested our first research question regarding the affiliative tendency of religious dones by examining exclusionary behavior toward a variety of religious affiliation groups. Contrary to the religious residue hypothesis, religious dones’ actions more closely resembled that of religious nones (i.e., never religious) than currently religious participants with regard to their inclusion/exclusion behavior toward a never religious (i.e., atheist) and a currently religious (i.e., Christian) target during a virtual ball-tossing game. Specifically, religious dones were more likely to include religious nones and to exclude currently religious targets.³

The results of Study 1 provided initial insights into our first research questions: Religious dones appear to treat religious nones more like their ingroup than they treat currently religious individuals, which does not support the religious residue hypothesis. Instead, these results suggest that once identity changes, group affiliative patterns may follow. Although Study 1 was promising, we sought to test our second research question: How are dones perceived and treated by other religious groups? Toward that end, we conducted several additional studies to test both research questions.

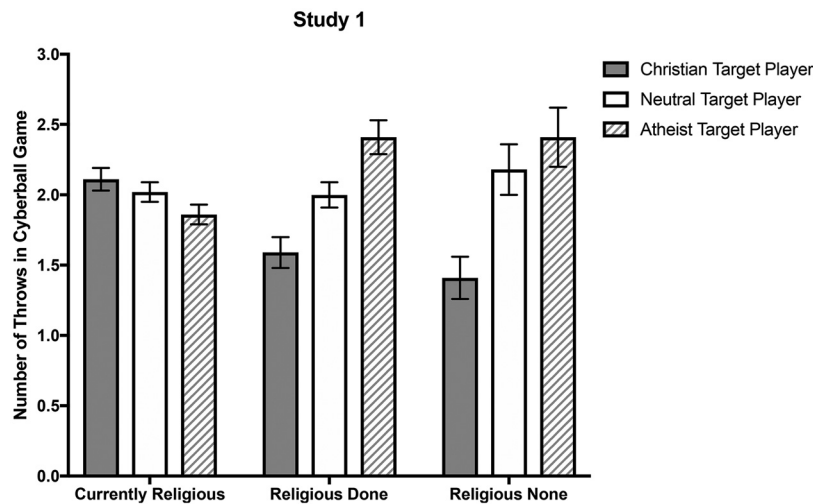
Study 2: The Religious Conjunction Fallacy

Study 2 examined ingroup preference via intuitive moral prejudice across the religious identity groups using a moral judgment task: the conjunction fallacy. The procedure involves presenting participants with a scenario describing an individual, and they are instructed to decide whether the individual is a member of one social group (e.g., a banker) or two social groups (e.g., a banker and a feminist). The conjunction fallacy is a cognitive error in which the overestimation of the likelihood of belonging to two social groups (which is always statistically more improbable than being part of only one social group) can reveal prejudicial attitudes while avoiding socially desirable responding. For example, assuming a member of a certain group is more likely to demonstrate negative or unsavory behavior (though more statistically improbable)

² It is interesting that the ingroup bias of religious individuals was smaller (and nonsignificant) than that of nonreligious individuals (i.e., dones and nones) given research on how religion motivates ingroup bias and parochial prosociality. (We thank an anonymous reviewer for highlighting this; see also Van Cappellen et al., 2017.)

³ Of note, targets were presented as active members of a group (walking group) organized around a particular religious identity, which can reinforce the perception of centrality of that identity and amplify the expected pattern of inclusion/exclusion behaviors. It is possible that religious dones were particularly wary of including a member of a religious group.

Figure 1
Mean Number of Throws in Cyberball Game Toward Each Target Player by Participants' Religious Identity in Study 1



Note. Error bars represent standard errors.

reveals a prejudicial attitude that is assessed without directly inquiring about one's feelings about our prejudice toward a target group (see Gervais et al., 2017). That is, this task is an inferential assessment of prejudice that avoids social desirability. We used this error as an index of attitudes toward the various religious groups. This procedure has been used in past research to investigate intuitive moral prejudice toward members of differing religious identities and has consistently revealed an antiatheist prejudice (Gervais et al., 2017). We preregistered our hypotheses (<https://osf.io/3s7mc/>) on the Open Science Framework. As with Study 1, our predictions aligned with the religious residue hypothesis, in which we anticipated religious dones would report affiliative tendencies more similar to currently religious than never religious individuals.

Method

Participants

Participants were 957 community members (570 women, 387 men) recruited from Amazon's Turk Prime with the goal of having equal representation from the three religious identity groups and thus were roughly one third of each currently religious ($n = 328$), formerly religious ($n = 314$), or never religious ($n = 315$). The sample ranged in age from 18 to 83 ($M = 41.63$, $SD = 15.72$) and was predominantly White/Caucasian (81.4%).

Materials and Procedure

Participants completed all measures online. After providing consent, participants completed a host of demographic questions, including self-reporting their religious identity by selecting one of the following options: "I identify as religious" (currently religious), "I was formerly religious, but no longer identify as religious" (formerly religious; religious done), or "I have never identified as religious" (never religious). Following this, participants completed two

conjunction fallacy tasks, which were embedded after the completion of other materials for unrelated projects.⁴ The first was taken from Tversky and Kahneman (1983), which described a banker named Linda who is a bright, outspoken philosophy major who is concerned with social justice; they were asked to indicate whether it is more probable that Linda is (a) a banker or (b) a banker and a feminist. This first conjunction fallacy served as a baseline measure to ensure that groups did not significantly differ in their tendency to commit the conjunction fallacy.

In the second, modeled after Gervais and colleagues (2017), participants read about a man who, as a younger child, would torture animals and, as an adult, killed five homeless people and buried their dismembered bodies in his basement. The religious identity of the target was experimentally manipulated, and participants were randomly assigned to indicate whether he was (a) a teacher or (b₁) a teacher and currently religious, (b₂) a teacher and formerly religious, or (b₃) a teacher and never religious. Thus, participants received one variation of three religious identities from which they could make the conjunction fallacy (currently, formerly, or never religious). We focused on the second conjunction fallacy in particular to reveal religious group preference. This yielded a 3 (Participant Religious Identity: currently, formerly, or never religious) × 3 (Target Religious Identity: currently, formerly, or never religious) design.

Given the distrust that many people exhibit toward atheists (Gervais et al., 2011), we suspected that the never religious target would elicit the highest incidences of the conjunction error. Whereas that group is a clear outgroup for currently religious individuals and a clear ingroup for never religious individuals, it may

⁴ Both Studies 2 and 3 were separately part of a series of studies conducted on their samples, so participants in each study completed other measures addressing different research questions designed for other research reports. These other data, not related to the current project, have been presented in Van Tongeren, DeWall, Hardy, and Schwadel (2021) and DeWall and Van Tongeren (2022).

represent either an ingroup or an outgroup for the religious dones. Thus, that target may be the most diagnostic for understanding how religious dones view themselves and their group affiliation.

Results

We conducted a 3 (Participant Religious Identity: currently, formerly, or never religious) \times 3 (Target Religious Identity: currently, formerly, or never religious) ANOVA on committing the conjunction fallacy error (i.e., indicating that the target was both a teacher and a member of the religious group). Conceptually replicating Gervais and colleagues' (2017) results showing robust intuitive moral prejudice toward atheists, the results revealed a significant main effect for the target's religious identity, $F(2, 948) = 38.84, p < .001$. Participants, regardless of their own religious identity, were more likely to assume that the target was never religious ($M = 57.3\%$) than formerly religious ($M = 43.2\%$) or currently religious ($M = 24.4\%$; $ps \leq .001$). However, this main effect was qualified by a significant interaction between participant religious identity and the target's religious identity, $F(4, 948) = 3.87, p = .004$ (see Figure 2).

First, we examined the affiliative tendencies of religious dones. Religious dones were significantly more likely to commit the conjunction fallacy for a never religious (52.0%) or formerly religious (40.7%) target relative to a currently religious target (25.2%; $ps < .001-.048$), viewing other religious dones ($p = .227$) and never religious targets ($p = .938$) similarly to how never religious individuals do. Compared to currently religious individuals, religious dones were less likely to commit the conjunction fallacy toward never religious targets ($p = .010$), showing an attenuated prejudice toward never religious targets. The affiliative pattern of dones more closely aligned with never religious individuals.

Next, we examined how dones are perceived by other religious identity groups. Currently religious participants were significantly more likely to commit the conjunction fallacy for a never religious target (71.3%), followed by the formerly religious target (44.9%) and

currently religious target (18.6%; all means significantly differed, $ps < .001$). That is, currently religious individuals reported an attenuated implicit prejudice toward religious dones relative to never religious targets, as measured by the conjunction fallacy. Never religious individuals were equally likely to commit the conjunction fallacy for religious dones and never religious targets ($p = .862$).

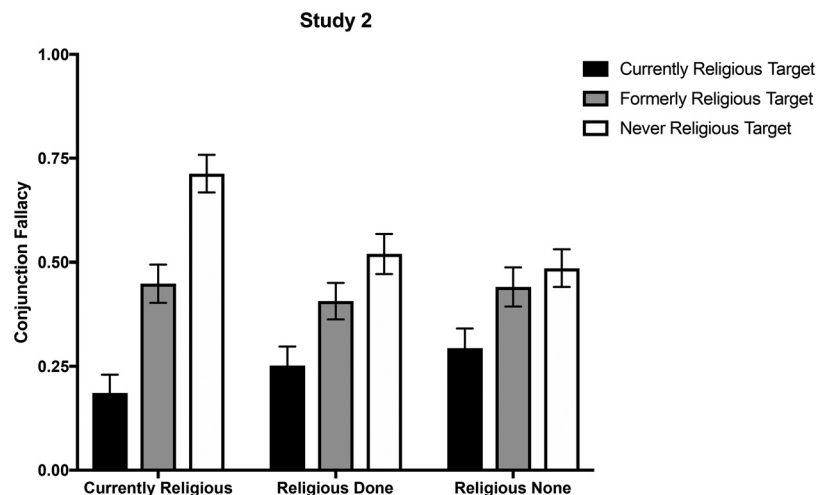
To rule out that these effects were simply driven by individual differences in religious identity groups to make the conjunction fallacy in general, we compared groups' scores on the tendency to infer that Linda was a banker and a feminist; these groups did not significantly differ, $F(2, 954) = 1.38, p = .252$. Thus, these differences were not simply an artifact of one religious identity group being more likely to commit conjunction fallacies.

Discussion

Study 2 replicated and extended Study 1 by testing our two primary research questions. We first examined the affiliative tendencies of religious dones. Although all groups demonstrated an antiatheist prejudice found in prior research (Gervais et al., 2017), religious dones reported an attenuated tendency (relative to currently religious people) to make the conjunction fallacy for never religious targets on equivalent levels as never religious participants. That is, religious dones demonstrate a greater preference toward never religious targets than currently religious participants do. This finding conceptually replicates Study 1 by showing that religious dones make group-based inferences more similar to religious nones when assessing the group that most closely mirrors their present state of religious identity and preferred nonreligious individuals.

Second, we examined how religious dones are perceived by other groups. Currently religious individuals were most likely to commit the conjunction fallacy when inferring behavior about a never religious target; however, they attenuated this tendency for formerly religious individuals. This suggests that currently religious individuals consider one's religious past (once being religious) when making inferences about the likelihood of one's present malicious behavior

Figure 2
Likelihood of Committing the Religious Conjunction Fallacy by Participants' Religious Identity in Study 2



Note. Error bars represent standard errors.

and tend to favor religious dones. Never religious individuals viewed religious dones similarly to never religious targets.

Taken together, as with Study 1, these results do not provide evidence for the religious residue hypothesis as it relates to group affiliative tendencies. Currently religious people consider one's religious past, whereas formerly religious individuals focus on the present. Moreover, religious dones do not closely resemble currently religious individuals in their perceptions of other groups. To ensure the reliability of these findings, we sought to replicate them in an independent sample.

Study 3: Replicating the Religious Conjunction Fallacy

Study 3 sought to directly replicate findings of Study 2 in an independent sample. Both Studies 1 and 2 showed that religious dones displayed actions and judgments more aligned with religious nones (and hinting at the notion that religious dones may consider never religious individuals as part of their ingroup)—these findings were unexpected given prior work on religious residue. Replicating this pattern again in Study 3 would grant greater confidence in the reliability of these findings.

Method

Participants

Participants were 945 community members (737 women, 208 men) recruited from Qualtrics Panels and were equally divided between currently religious ($n = 315$), formerly religious ($n = 315$), or never religious ($n = 315$). The sample ranged in age from 18 to 83 ($M = 41.63$, $SD = 15.72$) and was predominantly White/Caucasian (84.9%).

Materials and Procedure

Participants completed all measures online. As with Study 2, after providing informed consent, participants self-reported their religious identity amid a series of other demographic items and measures, and they then completed the two conjunction fallacy scenarios as in Study 2 after completing other measures designed for a different project.

Results

In this sample, we found a main effect of religious identity on likelihood to commit the conjunction fallacy in general, $F(2, 903) = 3.76$, $p = .024$. The formerly religious individuals were more likely to say that Linda is both a banker and a feminist than the currently religious group ($p = .020$). Because of this, we statistically controlled for this tendency by including responses to the first conjunction fallacy as a covariate.⁵

Once again, the results of the 3×3 ANCOVA revealed a significant main effect for the target's religious identity, $F(2, 885) = 30.80$, $p < .001$ (see Figure 3). Participants, regardless of their own religious identity, were more likely to assume that the target was never religious ($M = 62.8\%$) than formerly religious ($M = 43.8\%$) or currently religious ($M = 33.0\%$; $ps < .001-.014$). As in Study 2, these findings conceptually replicate previous work showing intuitive moral prejudice toward atheists (Gervais et al., 2017).

Once again, we found a significant interaction between participants' religious identity and the target's religious identity, $F(4, 895) = 5.72$, $p < .001$.

Examining the affiliative tendencies of religious dones, formerly religious individuals were significantly more likely to commit the conjunction fallacy for a never religious (65.7%) target than a formerly religious (40.0%) or currently religious (40.8%; $ps \leq .001$) target. Once again, they viewed other religious dones ($p = .993$) and never religious targets ($p = .176$) similarly to how never religious participants do. Compared to currently religious individuals, religious dones were more likely to commit the conjunction fallacy for currently religious targets ($p = .002$), on similar levels as never religious individuals ($p = .999$).

Exploring how religious dones are perceived by other groups, once again, currently religious participants were significantly more likely to commit the conjunction fallacy for a never religious target (69.1%), followed by a formerly religious target (40.0%), and then a currently religious target (18.0%; all means significantly differed, $ps < .001-.018$). As in Study 2, currently religious participants demonstrated an attenuated prejudice toward religious dones relative to never religious targets. Never religious individuals were equally as likely to commit the conjunction fallacy for religious dones and never religious targets ($ps = .197$).

Discussion

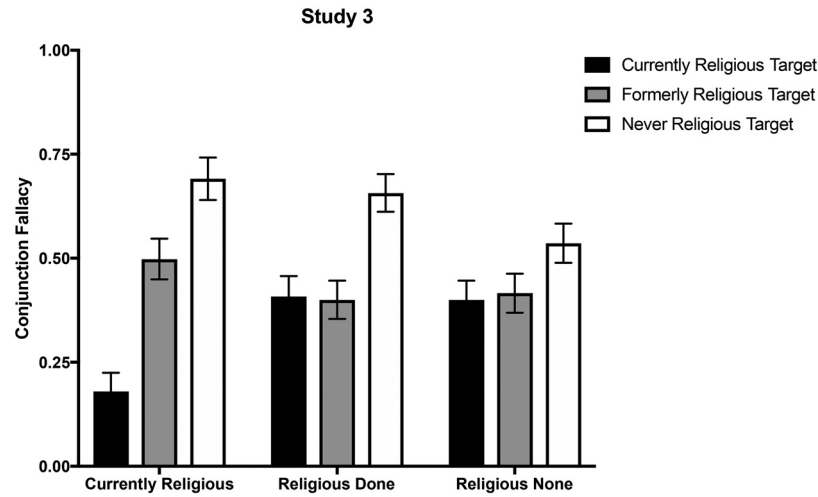
The results of Study 3 partially replicated the findings of Study 2. First, regarding the affiliative tendencies of religious dones, although most people once again demonstrated an intuitive moral prejudice against never religious individuals (consistent with previous research on antiatheist prejudice and with Study 2), religious dones committed the conjunction fallacy for never religious targets somewhere between currently religious and never religious individuals (and did not significantly differ from either group). Moreover, in this sample, religious dones committed the conjunction fallacy significantly more frequently when considering a religious target than currently religious individuals did—on levels similar to never religious individuals—suggesting that they more resemble the never religious by showing greater implicit prejudice against religious individuals than coreligionists express.

Second, we examined how dones are perceived by others. Both currently religious participants and formerly religious participants were less likely to commit the conjunction fallacy for religious dones relative to never religious targets. This pattern of attenuated prejudice toward religious dones by currently religious individuals is consistent with Study 2, though we did not see this pattern expressed by religious dones in the previous study. Again, never religious individuals viewed dones similarly to other nones, as in Study 2, though not different from currently religious targets in this study.

Across Studies 2 and 3, we see a picture emerging in which religious dones respond more like never religious individuals (their pattern of results in both studies is similar; see Figures 2 and 3): Relative to currently religious individuals, they both reported attenuated prejudice toward never religious targets (Study 2) and greater prejudice toward currently religious targets (Study 3).

⁵The results remain virtually unchanged when not including this covariate in subsequent analyses.

Figure 3
Likelihood of Committing the Religious Conjunction Fallacy by Participants' Religious Identity in Study 3



Note. Error bars represent standard errors.

Interestingly, currently religious individuals still maintain a preference for religious dones relative to targets who have never been religious.

Situating these findings in the broader research, which has found that religious psychology and behavior persists after deidentification (Van Tongeren, DeWall, Chen, et al., 2021), the results of Studies 2 and 3 reveal that when assessing group affiliation in ways that bypass social desirability (i.e., intuitive moral prejudice), religious dones demonstrate a somewhat greater affiliation toward never religious individuals than currently religious individuals do and less preference toward currently religious individuals. Combined with the results of Study 1, in which religious dones included atheist partners and excluded Christian partners, we see a pattern developing in which, although their religious psychology may persist after deidentifying, their identity-related self-concept, and subsequent group-based affiliative behaviors, are more quickly following their shift in identity. That is, the religious residue hypothesis may not extend to group affiliative tendencies and behaviors. To build upon these findings, we sought to conduct three additional studies to (a) assess behaviors toward each group (Study 4), (b) more directly assess prejudice (Studies 5 and 6), and (c) identify potential mediating mechanisms that may explain these findings (Studies 5 and 6).

Study 4: Sacrifice Behavior

To examine group affiliation, Study 1 examined behavior toward other groups, and Studies 2 and 3 relied on self-report measures of intuitive moral prejudice. In Study 4, we sought to investigate whether group preferences would extend to behaviors that incurred costs on one's own well-being. Namely, we examined sacrifice behavior that would benefit members from another religious identity group. A high-cost behavior (i.e., one that incurs personal costs) would provide a strong indication of group affiliation. We preregistered our hypotheses on the Open Science

Framework (<https://osf.io/fgqzcl>). We predicted an in-group preference (i.e., individuals sacrificing for their own ingroup) and tested the religious residue hypothesis that religious dones would prefer the currently religious targets relative to the never religious targets.

Method

Participants

We sampled 900 participants (300 currently religious, 300 formerly religious, 300 never religious; 619 women, 281 men) from Qualtrics Panels. The sample ranged in age from 18 to 87 ($M = 42.34$, $SD = 14.77$) and was primarily White/Caucasian (68.8%).

Measures and Procedure

After self-identifying their religious identity (as in previous studies) and completing several items about their religious beliefs and practices, participants selected a number between 0 and 100 that was ostensibly to be used to randomly determine their role of the study ("decider" or "doer"). However, following a brief (programmed) delay, all participants were told that they were the "decider" in the study, which meant that "you get to make decisions about what happens to you and your partner. Your partner will be the doer." Thus, there was no "partner" with whom they were working, but rather all participants responded to a set of fixed interactions programmed by the experimenters. Following this, they entered basic information about themselves that all participants had to complete, including if they or anyone in their family had experienced any hearing loss, in order to boost the credibility of the study. They also completed a short response box in which they wrote about their favorite hobby, favorite food, what they enjoyed doing in their free time, and anything else they would like their partner to know about them. After another delay (designed to give the impression they were waiting for their partner to finish writing), they

received feedback from their partner. All participants received the same basic information about their “partner”: “Ha, let's see, I'm kinda new to these studies, I haven't done a lot of them. A little about me . . . I like hanging out with friends and watching Netflix, I like pizza and sports.” However, participants were randomly assigned to work with a currently religious, formerly religious, or never religious partner. Participants in the currently religious partner condition also read, “And I'm glad they asked about religion because being religious is an important part of my identity. So I thought that was cool.” Participants in the formerly religious partner condition also read, “And I think it's weird that they asked about religion because being religious used to be an important part of my identity, but now I don't identify as religious at all. So I thought that was kinda strange.” Participants in the never religious partner condition also read, “And I think it's weird that they asked about religion because being religious has never been part of my identity. So I thought that was odd.”

After receiving this information indicating their partner's religious identity, participants were told that their partner would complete a series of problem-solving tasks. Each time their partner provided an incorrect answer for a task, their partner would be blasted with an aversive noise through their headphones. Participants listened to a sample noise blast (1 s) to better understand what their partner would experience, and they rated how aversive this noise was ($-100 = \text{not at all aversive}$ to $+100 = \text{very aversive}$). This noise was rated as rather aversive ($M = 50.65$, $SD = 50.24$).

Finally, participants underwent 50 trials in which they saw the puzzle their partner was ostensibly presented and were informed if their partner correctly or incorrectly solved the problem. If their partner offered a correct solution, the program advanced to the next problem after a short delay (to enhance believability). When their partner got the problem wrong, participants were informed that their partner would receive a 10-s aversive noise blast; however, participants could reduce the noise blast their partner experienced by reducing their own compensation for the study at \$0.01 per second (e.g., \$0.10 would eliminate all 10 s of noise blast their partner would experience). This process repeated for 50 iterations, in which their partner incorrectly answered half (i.e., 25) of the trials, yielding a possible sacrifice of \$0.00 to \$2.50. Given the amount participants received for their participation, this was likely the majority, if not entirety, of their participant compensation.⁶ Finally, after the trials, participants rated their partner on nine different dimensions (e.g., competent, intelligent) and completed a measure of meaning in life and demographics. They read a full debriefing at the end of study indicating that the study was designed to provide them feedback and they were not working with a partner; moreover, they were assured they would receive full compensation for their participation in the study.

Results

We examined the interaction between the participant's religious identity and the religious identity of their partner using a Poisson distribution. There was a main effect for religious identity, Wald's $\chi^2(2) = 36.26$, $p < .001$, and a main effect for condition Wald's $\chi^2(2) = 19.11$, $p < .001$, but these were subsumed by a significant interaction between religious identity and condition, Wald's $\chi^2(4) = 357.87$, $p < .001$. We examined the pairwise comparisons

of this interaction effect (see Figure 4 for means and standard errors).

Addressing our first research question regarding the affiliative tendencies of religious dones, we found that religious dones sacrificed significantly more for never religious partners than for formerly religious ($p < .001$) and currently religious ($p < .001$) partners and also sacrificed more for currently religious partners than for formerly religious partners ($p < .001$). In fact, never religious partners elicited the most sacrifice from religious dones, followed by never religious participants and currently religious participants (all comparisons significantly varied, $ps < .001$). In other words, religious dones sacrificed the most for never religious partners, even more so than members of the dones' own ingroup (i.e., other never religious participants). The affiliative pattern of religious dones was a clear preference for the never religious, followed by the currently religious and formerly religious—the latter of which were both similar to the levels of sacrifice indicated by never religious individuals ($p = .274$; $p = .269$).

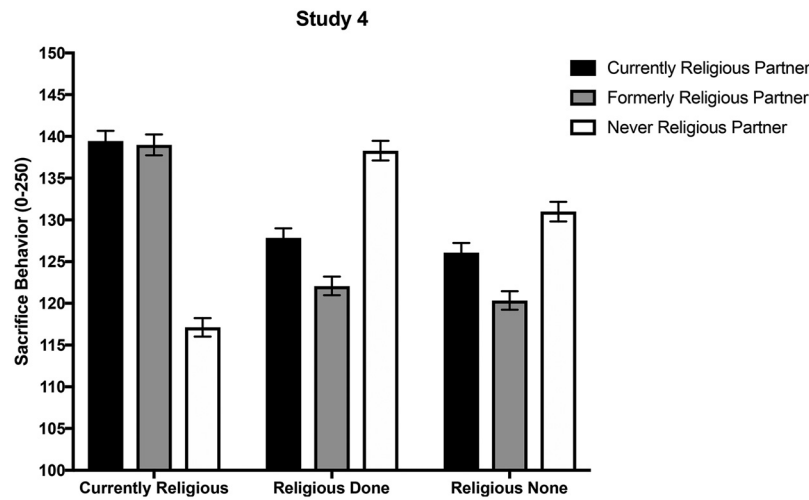
How do other groups treat religious dones? Currently religious individuals sacrificed just as much for formerly religious partners as they did for their own ingroup of currently religious partners ($p = .789$), and both degrees of sacrifice were significantly higher than they sacrificed for never religious partners ($ps < .001$). This reveals a pattern in ingroup preference toward religious dones among religious participants. Never religious individuals sacrificed more for never religious partners than currently religious ($p = .003$) and formerly religious ($p < .001$) partners. Unexpectedly, they also sacrificed more for currently religious partners than formerly religious partners ($p < .001$). Despite the strong preference of religious dones toward the never religious, never religious individuals did not reciprocate such positive sentiment toward dones with sacrifice behavior. Religious dones also elicited the most sacrifice from currently religious participants relative to formerly ($p < .001$) and never ($p < .001$) religious participants, who did not differ in their sacrifice behaviors toward formerly religious targets.

Discussion

The results of Study 4 illuminated the groups for which individuals of various religious identities would sacrifice. When looking at the affiliative tendencies of religious dones, formerly religious individuals favored never religious partners with their sacrifice behaviors—even more so than other never religious participants did—indicative that they prioritized that group the most, which likely holds beliefs and values that they now hold and may desire. However, religious dones did not sacrifice as much for currently religious partners, a group with which they formerly identified. This pattern suggests that religious dones distance themselves from their former group (i.e., currently religious individuals) and prioritize a group with which they now identify (i.e., never religious individuals), even when their former group still favors them and their new group does not yet value them in the same way: Never religious individuals sacrificed the least for dones, including (unexpectedly) less than for currently religious individuals.

⁶ Participants were paid by Qualtrics Panels (whom the researchers paid \$5.25 per participant for data collection services), who set the compensation rate for the study.

Figure 4
Mean Amount of Money Sacrificed to Reduce Target's Punishment by Participants' Religious Identity in Study 4



Note. Error bars represent standard errors.

Indeed, examining our second research question that explores how religious dones are treated by others, currently religious individuals treated formerly religious partners the same as their own religious ingroup in how much they sacrificed, potentially signaling that they still considered religious dones to be part of their religious ingroup, whereas the never religious participants sacrificed the least for religious dones. This suggests that religious dones are perceived by others as retaining some portion of their formerly religious identity.

One aspect of these findings that remains unclear is why religious dones sacrificed the least for other religious dones, even less so than currently religious targets. Their pattern was similar to that of never religious individuals, which is consistent with the results of Studies 2 and 3 showing how religious dones' affiliative patterns look similar to religious nones. Future work should explore what drives these particularly low sacrifice behaviors among religious dones toward their own ingroup.

Study 4 provides behavioral evidence addressing our two research questions. First, contrary to the religious residue hypothesis, religious dones are more likely to sacrifice for never religious individuals relative to currently religious individuals and other religious dones, highlighting their preference for the never religious. Second, currently religious individuals are likely to sacrifice more for dones than they do never religious individuals and more than never religious individuals do for dones. In fact, currently religious individuals treated religious dones as they did with members of their own ingroup (i.e., coreligionists). What might be driving these differences? And in what ways might identity need to be disentangled from other aspects of the religious experience, such as belief? Studies 5 and 6 addressed these questions directly.

Study 5: Disentangling Belief and Identity

The results of the first four studies have provided converging evidence that the religious residue hypothesis does not extend to affiliative behavior. Religious dones tend to view themselves more aligned with never religious individuals, although the currently religious seek to include them and the never religious do

not reciprocate their ingroup inclusion. On some level, religious dones are viewed metaphorically as a *sheep in wolf's clothing*: inwardly religious while projecting an outwardly nonreligious identity. Accordingly, we shifted our predictions in the final two studies to test this hypothesis.

Thus far, our examination of group affiliation processes centered either on religious belief (Study 1) or religious identity (Studies 2–4). However, it is possible that some individuals may conflate the two, assuming that the religiously identified hold a belief in God, whereas those that do not identify do not hold such a belief. Despite that identity and beliefs are separate, and one need not identify as religious to affirm beliefs about the supernatural (e.g., Van Tongeren & DeWALL, 2021), we sought to fully disentangle these features of the religious and spiritual experience. Accordingly, in Study 5, we asked participants ranging in religious identity to rate targets that ranged in both belief status (i.e., currently, formerly, or never believed in God) and religious identity (currently, formerly, or never identified as religious). Accordingly, we implemented a 3 (Participant's Religious Identity: currently vs. formerly vs. never) \times 3 (Target's Religious Identity: currently vs. formerly vs. never) \times 3 (Target's Current Belief: currently vs. formerly vs. never) mixed design, with the participant's religious identity as a between-participants factor and the target's identity and belief as within-participant factors. We sought to recruit 300 participants from each religious identity group, for a total of 900 participants.

In addition, we sought to rule out a potential alternative explanation: Perhaps religious dones are viewed and rated negatively by some because they are in a transitional identity state. That is, because their identity is not stable, they are viewed negatively. Thus, we added a 10th group, which is also a transitional identity, for participants to evaluate: recent religious converts. Doing so allows us to examine whether the evaluations are due to the transitional nature of an identity or the content or nature of that identity.

Accounting for the results of the first four studies, we shifted our predictions. We preregistered our study (<https://osf.io/u7b9t>)

on the Open Science Framework, and we had two primary hypotheses: (a) Currently religious individuals will rate more favorably currently religious and formerly religious individuals relative to never religious individuals, and (b) formerly religious individuals will rate more favorably never religious individuals relative to currently religious individuals. We also intended to (c) explore whether perceptions of trust, ingroup inclusion, or belief superiority/belief contamination mediate any associations on prejudice or dehumanization and (d) rule out that perceptions of formerly religious individuals (i.e., religious donees) are due to their transitory nature by comparing them to other groups that also appear in transition (e.g., new religious converts).

Method

Participants

We sampled 1,035 participants (342 currently religious, 359 formerly religious, 334 never religious; 629 women, 399 men, seven other) from Cloud Research. The sample ranged in age from 18 to 90 ($M = 40.74$, $SD = 17.92$) and was primarily White/Caucasian (72.4%).

Materials and Procedure

Participants signed up for a study on social attitudes. After collecting demographic information, including their religious identity, to justify our cover story, participants were instructed to rate a series of target identities, including 3–4 targets from blocks on politics (e.g., republicans, democrats, libertarians, independents), religion (e.g., currently, formerly, never religious), ethnicity, (e.g., Asians, Blacks/African Americans, Native Americans, Whites/Caucasians), and geographic groups (e.g., people from the northeastern United States, southern United States, Pacific northwestern United States, and midwestern United States). Participants were then told that to reduce survey length, they were randomly selected to go in-depth on one particular block of targets and were selected to evaluate religious targets (although all participants rated religious targets in-depth).

Participants rated the 10 targets (see Table 1) on several dependent variables: prejudice, via affective feeling thermometers ranging from -100 (*extremely cold/negative*) to $+100$ (*extremely warm/positive*); trustworthiness on a -100 (*extremely untrustworthy*) to $+100$ (*extremely trustworthy*) slider; ingroup perception on a -100 (*part of an "outgroup"*) to $+100$ (*part of my "ingroup"*) slider; contamination of beliefs via asking if they worry this group will contaminate their beliefs on a -100 (*not at all*) to $+100$ (*completely*) slider; and future transition via perceptions on a -100 (*become less religious*) to $+100$ (*become more religious*) slider. Finally, they also completed the Ascent measure of blatant dehumanization (Kteily et al., 2015), which depicts humans in various stages of evolution from 0 (*lower animal*) to 100 (*upright, walking*

human) and asks participants to place group targets along this continuum of humanity. We only present the results for this measure in the [online supplemental materials](#).

Results

To replicate previous findings, we first examined perceptions of targets based on their religious identity (see Figure 5, left panel). Next, we examined perceptions of targets based on the target's belief (see Figure 5, right panel). Following this, we examined perceptions of how transitory the different religious groups were perceived to be. Finally, we examined potential mediating mechanisms (see Figure 6). A detailed examination of each dependent variable (except for belief contamination, for which there were no significant effects; all $ps = .096-.571$ for all main effects and interactions) is presented in the [online supplemental materials](#), along with the full $3 \times 3 \times 3$ interactions. We created a composite summary variable for warmth, trust, and ingroup identification. The correlations among variables for each target were moderately strong ($rs = .553-.793$), so we standardized these scores and analyzed the composite z score. However, for our mediation analyses, we kept these scores separate and investigated trust and ingroup identification as mechanisms for judgments of warmth.

Target Religious Identity

We first examined how participants rated targets of various religious identities. A 3 (Participant Identity) \times 3 (Target Identity) repeated-measures ANOVA revealed a significant interaction on this composite attitudinal evaluation, $F(4, 2062) = 42.51$, Wilk's $\lambda = .853$, $p < .001$. Examining the first research question (i.e., affiliative tendencies of donees), donees reported significantly more favorable attitudes toward other donees ($M = .01$, $SE = .04$) and never religious targets ($M = .04$, $SE = .04$) than currently religious targets ($M = -.11$, $SE = .04$; $ps < .001$), and their attitudes toward donees and never religious did not differ ($p = .312$).

Examining the second research question (i.e., how are donees perceived?), currently religious participants rated donees ($M = .09$, $SE = .04$) significantly more favorably ($p < .001$) than never religious targets ($M = -.02$, $SE = .04$), though not as favorably as currently religious targets ($M = .28$, $SE = .04$; $p < .001$). Never religious participants rated donees ($M = -.10$, $SE = .04$) in the middle, significantly more favorably ($p = .003$) than currently religious targets ($M = -.17$, $SE = .04$) and significantly less favorably ($p < .001$) than never religious targets ($M = -.02$, $SE = .04$). Taken together, this suggests that donees view themselves and never religious targets similarly, whereas currently religious and never religious targets view donees in the middle—not as favorably as their own group but more favorably than the opposite religious identity group.

Table 1

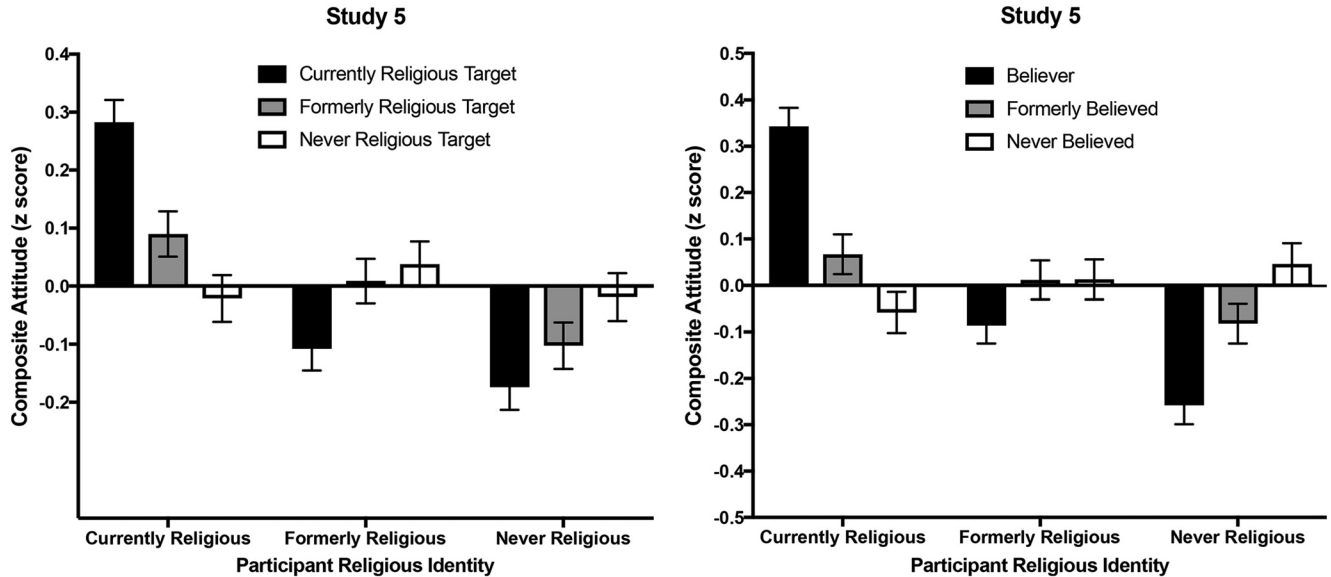
Targets Evaluated in Studies 5 and 6

Belief in God	Currently religious	Formerly religious	Never religious
Currently believes in God	Religious believer	Believing donee	Nonreligious believer
Formerly believed in God	Religious deconvert	Deconverted donee	Nonreligious deconvert
Never believed in God	Religious atheist	Atheist donee	Nonreligious atheist

Note. We also included the group “newly identifies as religious and newly believes in God” (new religious convert).

Figure 5

Mean Perceptions of Currently, Formerly, and Never Religious Individuals (Left) and Current, Former, and Never Believers (Right) in Study 5



Note. Error bars represent standard errors.

Target Religious Belief

We next turned to how participants rated targets of different religious beliefs. A 3 (Participant Identity) \times 3 (Target Belief) repeated-measures ANOVA revealed a significant interaction on this composite attitudinal evaluation, $F(4, 2062) = 31.43$, Wilk's $\lambda = .888$, $p < .001$. Examining the affiliative tendencies of donees, religious donees reported more favorable attitudes toward former believers ($M = .01$, $SE = .04$) and those who never believed ($M = .01$, $SE = .04$) than current believers ($M = -.09$, $SE = .04$; $ps = .013$ and $.080$, respectively), and their attitudes toward former and never believers did not differ ($p = 1.00$).

Examining how donees are perceived, currently religious participants rated former believers ($M = .07$, $SE = .04$) significantly more favorably ($p < .001$) than those who never believed ($M = -.06$, $SE = .04$), though not as favorably as current believers ($M = .34$, $SE = .04$; $p < .001$). Never religious participants rated former believers ($M = -.08$, $SE = .04$) in the middle, significantly more favorably ($p = .003$) than current believers ($M = -.26$, $SE = .04$) and significantly less favorably ($p < .001$) than those who never believed ($M = .04$, $SE = .05$). Similar to religious identity, donees view former believers and those who never believed similarly, whereas currently religious and never religious targets view former believers in the middle. Whether examining religious identity or belief, the pattern of results is similar.

Potential Mediating Mechanisms

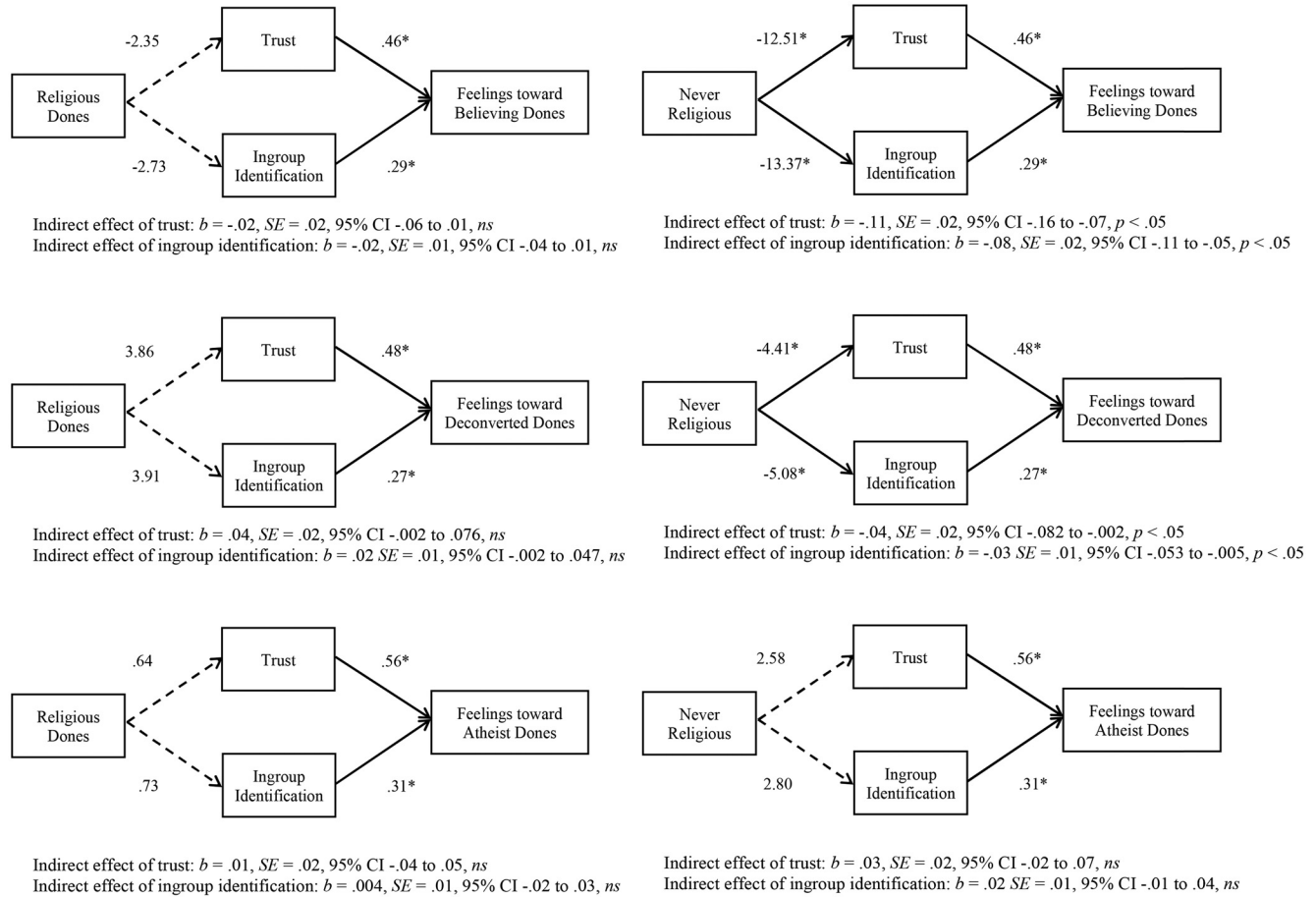
We used PROCESS (Hayes, 2013) to test for the indirect association between religious identity and feelings of prejudice (i.e., warmth) toward the different targets via our preregistered proposed mediators: trust, ingroup identification, and belief contamination. However, given that there were no significant effects on belief contamination, we focused on trust and ingroup identification. Given our

primary research questions about religious donees, and because PROCESS is the current gold standard for mediational models but is not designed to handle repeated-measures data (especially with as many measurement targets as we included), we decided to focus on evaluations of religious donees at each of the three levels of belief: current, former, and never. Accordingly, the participants' religious identity was the X variable, their feeling thermometer for target group was the Y variable, and the potential mediators—trust and ingroup identification—were the M variables. We tested the mediators simultaneously, using PROCESS Model 4 over 5,000 bootstrapping iterations and testing religious identity as a multicategorical variable. We examined two comparisons: The first coded currently religious participants as -1 , never religious participants as 0 , and religious donees as 1 to highlight how donees tend to respond compared to the currently religious; the second coded currently religious participants as -1 , religious donees as 0 , and the never religious participants 1 to highlight how never religious individuals tend to respond compared to the currently religious. Indirect effects are presented in Figure 6 (and a full description of these analyses is presented in the online supplemental materials).

We disentangled belief from the target religious donees. Whereas all targets were described as being formerly religious, we examined perceptions of believing donees (i.e., who currently believed in God), deconverted donees (i.e., who formerly believed in God), and atheist donees (i.e., who never believed in God). For formerly religious participants, compared to currently religious participants, neither trust nor ingroup identification was a significant mediator of prejudice toward any target group. For never religious participants compared to currently religious participants, both trust and ingroup identification explained (significant mediators) prejudice toward believing donees and deconverted donees, though they were not significant mediators for prejudice toward atheist donees (see Table 1 for each target label's details).

Figure 6

Mediational Analyses of Religious Dones' (Left Panel) and Never Religious Individuals' (Right Panel) Feelings Toward Believing Dones (Top), Deconverted Dones (Middle), and Atheist Dones (Bottom) via Trust and Ingroup Identification in Study 5



Note. Currently religious participants were the comparison group (coded as 0). CI = confidence interval.

* $p < .05$.

Are Dones Seen as “in Transition?”

One possible explanation for perceptions regarding religious dones is that their identity is more labile or in transition than other “firmer” religious identities. Accordingly, we examined participants’ feelings of warmth toward another “transitory” group: religious converts. Currently religious participants rated religious converts ($M = 41.10, SE = 2.85$) as warmly as they rated formerly religious believers ($p = 1.00$), suggesting an ingroup preference for current belief. Religious dones rated religious converts ($M = 16.36, SE = 2.78$) significantly less warmly than formerly religious believers ($p = .004$) and never religious believers ($p < .0005$), suggesting they prioritize current belief. Never religious participants rated religious converts significantly less warmly than never religious believers ($p = .003$) and never religious individuals who never believed ($p = .008$), again prioritizing current belief. This suggests that ratings of religious dones are not solely driven by perceptions of their transitory nature.

Next, we explored participants’ responses to the slider scale item assessing whether a group is likely to become more (+100)

or less (–100) religious in the future. Examining religious done targets, currently religious individuals were more likely to view believing dones as likely to become more religious ($M = 28.15, SE = 2.64$) than formerly religious ($M = 13.46, SE = 2.57; p < .0005$) or never religious ($M = 10.69, SE = 2.67; p < .0005$) participants did, who did not differ ($p = .838$). Similarly, currently religious individuals were more likely to view deconverted dones as likely to become more religious ($M = 13.77, SE = 2.77$) than formerly religious ($M = -.24, SE = 2.70; p = .001$) or never religious ($M = 3.33, SE = 2.79; p = .024$) participants did, who did not differ ($p = .735$). And currently religious participants ($M = 3.45, SE = 2.88$) were more likely than formerly religious participants ($M = -6.86, SE = 2.81$) to view never believing dones as likely to become more religious ($p = .031$), though neither group differed from never religious participants ($M = -1.97, SE = 2.91; ps \geq .461$). Currently religious participants consistently predicted that religious dones—across different levels of belief—would become more religious in the future. Perhaps part of religious individuals’ positive feelings toward dones is that they see a potential for them to return to their religious group in the future.

Discussion

Study 5 provided important insights and clarifications into our two central questions regarding the affiliative tendencies of religious donees and how religious donees are perceived by different religious groups by parsing apart religious identity and belief. We found similar patterns to the first four studies: First, religious donees preferred other religious donees and never religious targets relative to currently religious targets and rated them nearly identically across all dependent measures. A similar pattern emerged for belief when examining former believers. Second, both currently religious participants and never religious participants view donees in the middle—not as favorably as their own ingroup but more favorably than the opposite religious outgroup. Thus, we find support replicating the general pattern from the first four studies: Currently religious individuals favor and trust coreligionists, followed by donees and finally nones, whereas donees favor other donees and nones; never religious individuals prefer their own group, followed by donees, and then religious targets.

What might account for these effects? We examined mediating mechanisms to try to understand what might be responsible for these patterns. We predicted that trust, ingroup inclusion, and belief contamination might be potential mediators. Although belief contamination did not change between groups, we found evidence that suggests decreased trust and ingroup identification might partially explain why never religious individuals report less favorable feelings toward religious donees. Specifically, never religious individuals report less trust toward and ingroup inclusion of believing donees and deconverted donees: Believing—or even having ever believed—erodes trust among the never religious and elicits less inclusion of donees in their ingroup, which leads to more negative feelings.

Finally, we examined how the groups viewed the transitory nature of religious donees. Currently religious individuals consistently rated donees, regardless of whether or not they currently or ever believed, as more likely to become more religious in the future compared to donees and never religious individuals. This suggests that part of the positive feelings and behaviors toward religious donees might be due to religious participants' perception that donees may perhaps return to their ingroup again in the future—a sentiment not shared by the nonreligious.

Study 5 provided important nuance to our findings and advances previous research on religious donees and the religious residue effect. In addition, we provided clarification regarding what might be explaining these associations. In Study 6, we sought to replicate these findings in a separate sample, as well as test another mediating mechanism (belief superiority).

Study 6: Replication and Examination of an Additional Mediator

The goal of Study 6 was to (a) replicate most of the findings of Study 5 and (b) examine an additional potential mediating mechanism. Participants completed a near identical procedure to Study 5, though we did not include the Ascent measure of prejudice. Moreover, in addition to trust and ingroup identification, we examined belief superiority as a potential mediator. We preregistered our study (<https://osf.io/m7kfa>) on the Open Science Framework. Again, we predicted that currently religious individuals would rate more favorably currently religious and formerly religious individuals relative to never religious individuals and that religious donees

would rate more favorably never religious individuals relative to currently religious individuals.

Method

Participants

We sampled 905 participants (303 currently religious, 307 formerly religious, 295 never religious; 506 women, 390 men, nine other) from Cloud Research. The sample ranged in age from 18 to 78 ($M = 41.45$, $SD = 14.03$) and was primarily White/Caucasian (75.9%).

Materials and Procedure

Participants completed the same procedure as in Study 5, with two exceptions: (a) we did not include the Ascent measure of (de)humanization, and (b) we examined trust, ingroup identification, and belief superiority as potential mediators. Belief superiority was assessed using one item on a 1–5 scale: “In your view, how much more correct are your views about the existence of God than other people’s views about this issue?” The other variables were assessed using the same measures as in Study 5.

Results

As in Study 5, we first examined perceptions of targets based on their religious identity (see Figure 7, left panel) and then the target’s belief (see Figure 7, right panel). We also tested mediating mechanisms (see Figure 8). Once again, a detailed examination of each dependent variable is presented in the [online supplemental materials](#), along with the full $3 \times 3 \times 3$ interaction. Once again, we examined the standardized composite variable consisting of warmth, trust, and ingroup identification. The correlations among variables for each target were moderately strong ($r_s = .487-.857$).

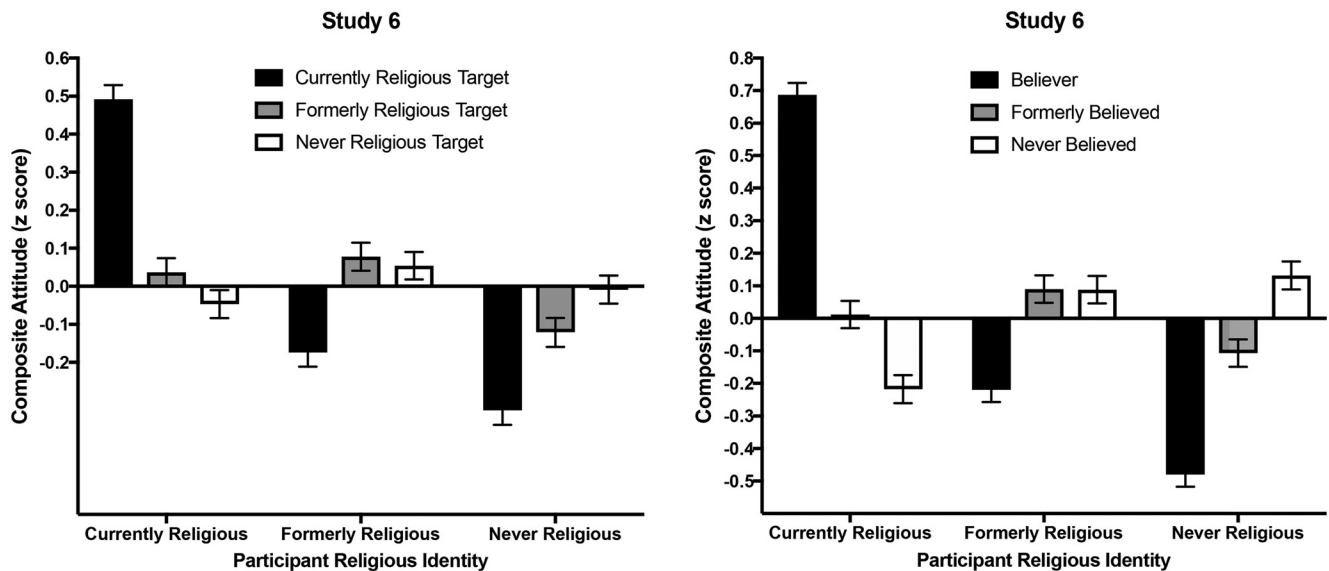
Target Religious Identity

A 3 (Participant Identity) \times 3 (Target Identity) repeated-measures ANOVA revealed a significant interaction on this composite attitudinal evaluation, $F(4, 1788) = 107.05$, Wilk’s $\lambda = .651$, $p < .001$. Examining the first research question (i.e., affiliative tendencies of donees), religious donees reported significantly more favorable attitudes toward other donees ($M = .07$, $SE = .04$) and never religious targets ($M = .05$, $SE = .04$) than currently religious targets ($M = -.17$, $SE = .04$; $p_s < .001$), and their attitudes toward donees and never religious did not differ ($p = .377$).

Examining the second research question (i.e., how are donees perceived?), currently religious participants rated donees ($M = .04$, $SE = .04$) significantly more favorably ($p < .001$) than never religious targets ($M = -.05$, $SE = .04$), though not as favorably as currently religious targets ($M = .49$, $SE = .04$; $p < .001$). Never religious participants rated donees ($M = -.12$, $SE = .04$) in the middle, significantly more favorably ($p < .001$) than currently religious targets ($M = -.33$, $SE = .04$) and significantly less favorably ($p < .001$) than never religious targets ($M = -.01$, $SE = .04$). This aligns with Study 5 and once again suggests that donees view themselves and never religious targets similarly, whereas currently religious and never religious targets view donees in the middle, between their own group and other religious outgroups.

Figure 7

Mean Perceptions of Currently, Formerly, and Never Religious Individuals (Left) and Current, Former, and Never Believers (Right) in Study 6



Note. Error bars represent standard errors.

Target Religious Belief

A 3 (Participant Identity) \times 3 (Target Identity) repeated-measures ANOVA revealed a significant interaction on this composite attitudinal evaluation, $F(4, 1788) = 132.44$, Wilk's $\lambda = .595$, $p < .001$. Examining the affiliative tendencies of dones, religious dones reported significantly more favorable attitudes toward former believers ($M = .09$, $SE = .04$) and never believers ($M = .09$, $SE = .04$) than current believers ($M = -.22$, $SE = .04$; $ps < .001$), and their attitudes toward former believers and those who never believed did not differ ($p = 1.00$).

Examining how dones are perceived, currently religious participants rated former believers ($M = .01$, $SE = .04$) significantly more favorably ($p < .001$) than those who never believed ($M = -.22$, $SE = .04$), though not as favorably as current believers ($M = .99$, $SE = .04$; $p < .001$). Never religious participants rated former believers ($M = -.11$, $SE = .04$) in the middle, significantly more favorably ($p < .001$) than current believers ($M = -.48$, $SE = .04$) and significantly less favorably ($p < .001$) than believers ($M = .13$, $SE = .04$). Consistent with the results examining religious identity and replicating the pattern in Study 5, dones prefer former and never believers to those who currently believe, whereas currently religious and never religious participants view dones as in the middle. Moreover, this provides additional support that religious identity and belief are viewed similarly.

Potential Mediating Mechanisms

We sought to use the same PROCESS model (Model 4: simultaneous mediators) to test for the indirect association between religious identity and feelings of prejudice toward the different targets via our proposed mediators: trust, ingroup identification, and belief superiority. Indirect effects are presented in Figure 8 (and a full description of these analyses is presented in the online supplemental materials).

For formerly religious participants, although belief superiority was not a significant mediator of prejudice toward any target done group, both trust and ingroup identification significantly mediated the association of prejudice toward believing, deconverted, and atheist dones. For never religious participants, trust, ingroup identification, and belief superiority all mediated the association of prejudice toward believing dones, trust and ingroup identification were significant mediators for atheist dones, and none of the three were significant mediators when examining deconverted dones.

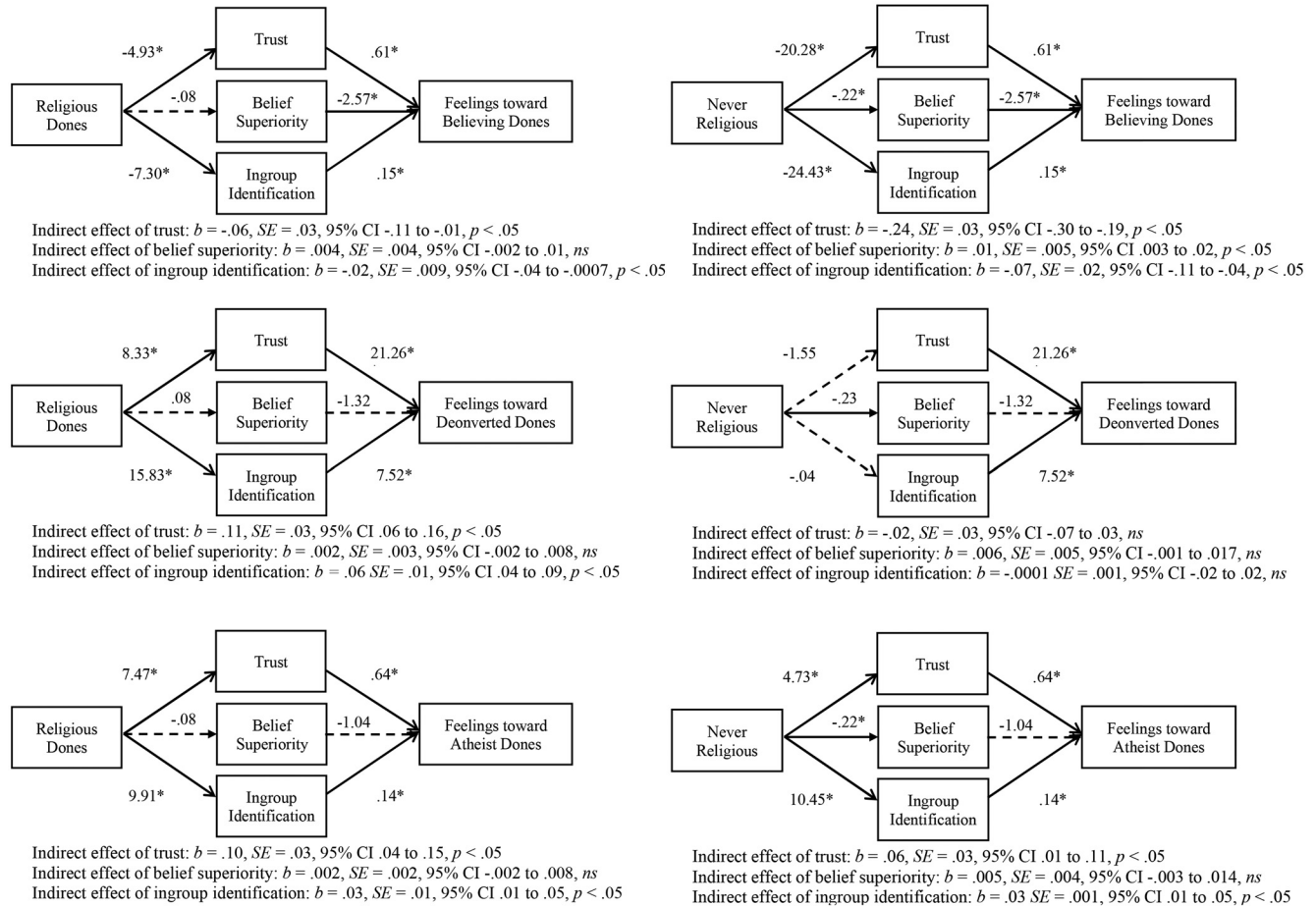
The Changing Nature of Dones

Once again, we examined perceptions of dones as being in transition. Currently religious participants rated religious converts ($M = 63.25$, $SE = 2.29$) significantly more favorably than every other group (all $ps < .001$) except religious believers ($M = 76.08$, $SE = 1.89$), who they rated the most favorably. For religious dones, religious converts ($M = -14.38$, $SE = 3.17$) were rated the least positively, significantly less warmly than every other group ($ps < .0005$) except religious believers ($M = -10.17$, $SE = 2.95$; $p = .330$), which they viewed as similar. A related pattern emerged for the never religious participants, who also rated religious converts ($M = -27.30$, $SE = 2.87$) less warmly than every other group ($ps < .0005$) except religious believers ($M = -23.02$, $SE = 2.59$; $p = .566$), who they viewed as similar. This suggests that as another group in transition, religious converts are viewed nearly identically to religious believers and that perceptions of dones are not merely due to their recent change. Once again, this evidence hints that the irreligious history of converts is not as potent as the religious history of dones.

When examining perceptions of religious dones' likelihood of future religious change, in this sample, currently religious individuals were more likely to view believing dones as more likely to become more religious ($M = 22.79$, $SE = 2.57$) than did formerly religious participants ($M = 4.09$, $SE = 2.56$; $p < .0005$) or never religious

Figure 8

Mediational Analyses of Religious Dones' (Left Panel) and Never Religious Individuals' (Right Panel) Feelings Toward Believing Dones (Top), Deconverted Dones (Middle), and Atheist Dones (Bottom) via Trust and Ingroup Identification in Study 6



Note. Currently religious participants were the comparison group (coded as 0). CI = confidence interval.

* $p < .05$.

participants ($M = 5.22, SE = 2.61; p < .0005$), who did not differ ($p = .985$). Similarly, although all participants viewed deconverted dones as likely to become less religious, currently religious individuals did so to a less degree ($M = -14.45, SE = 2.64$) than formerly religious ($M = -34.45, SE = 2.62; p < .0005$) or never religious ($M = -25.71, SE = 2.68; p = .008$) participants, who marginally differed ($p = .063$). For never believing dones, formerly religious individuals estimated that group would move away from religion ($M = -39.21, SE = 2.64$) significantly more than currently religious ($M = -26.39, SE = 2.66; p = .002$) and never religious ($M = -30.90, SE = 2.86; p = .083$) individuals estimated; those latter two groups did not differ ($p = .551$). These results suggest that currently religious individuals estimate dones either may become more religious or will not move away from religion as strongly relative to estimates from other dones or never religious individuals. In fact, dones predict that other dones who never believed will become less religious than other groups estimate.

Discussion

The results of Study 6 advanced our findings in several ways. First, regarding the affiliative tendencies of dones, the general

pattern of findings from the previous studies emerged for religious identity and belief: Religious dones prefer other dones and nones significantly more than currently religious targets. Second, examining how religious dones are perceived by other groups, currently religious participants prefer other coreligionists, followed by dones, and least prefer never religious individuals; never religious prefer others who were never religious, followed by dones, and least prefer religious individuals.

The mediational analyses in Study 6 diverged from those in Study 5. In this sample, trust and ingroup identification were significant mediators when examining the prejudice formerly religious individuals (compared to currently religious) hold toward believing, deconverted, and atheist dones, a pattern not seen in the previous study. In addition, for never religious participants (compared to currently religious), trust, ingroup identification, and belief superiority all mediated the association of prejudice toward believing dones, and trust and ingroup identification were significant mediators toward atheist dones. For religious dones, to the degree that they trust or identify other dones as part of their ingroup, they report warmer feelings, and a similar pattern emerged for never religious participants who feel

negatively toward believing dones and more positive toward dones who never believed.

Moreover, these results provide important nuance regarding the types of religious or nonreligious individuals consider when making evaluations. In this sample, religious dones trust and feel favorably toward deconverted dones and never believing dones, whereas the mediational analyses suggested that never religious individuals tend to trust and consider as part of their ingroup dones who have never believed, whereas they do not trust nor include in their ingroup believing dones. Religious dones can appreciate having left one’s beliefs behind, whereas the never religious may be suspicious of lingering effect of belief, perhaps perceiving the “sheep in wolf’s clothing.” Indeed, religious dones were slightly more likely than never religious individuals to assume that deconverted or never believing dones would become less religious in the future. Dones see themselves as moving toward the nonreligious more than the never religious or currently religious participants do.

General Discussion

Each year, many people transition to new religious identities. However, previous research had yet to examine how people who transition from identifying as religious to nonreligious view and act toward people who are more stable in their religious or nonreligious identifies. Similarly, little work had explored how the currently religious and never religious view and act toward these religious dones. Accordingly, our work was framed by two primary research questions. First, we sought to explore the group-affiliative patterns of religious dones. Recent research has suggested a religious residue effect, in which religious dones continue to resemble currently religious people in terms of how they think, feel, and act (Van Tongeren, DeWall, Chen, et al., 2021) across a variety of behaviors (DeWall & Van Tongeren, 2022) and attitudes (Van Tongeren, DeWall, Hardy, & Schwadel, 2021). Therefore, we began this investigation with the hypothesis that religious dones would more closely resemble currently religious people than never religious people do. Second, we intended to examine how other religious groups view and relate to religious dones. Across six

studies, we tested these questions by examining inclusionary behavior (Study 1), intuitive moral prejudice (Studies 2 and 3), self-sacrificial behavior (Study 4), and feelings of trust, ingroup identification, and prejudice (Studies 5 and 6). A summary of our findings across these six studies is presented in Table 2.

Addressing our first research question—regarding the affiliative tendencies of religious dones—contrary to the religious residue hypothesis, religious dones rather consistently viewed religious individuals as part of their outgroup and never religious individuals as part of their ingroup. Their shift in social identity reflected their perceptions of group affiliation. Study 1 showed that religious dones were more likely to include religious nones (i.e., atheists) and reject currently religious people (i.e., Christians). Study 2 revealed that religious dones were less likely to show intuitive moral prejudice toward never religious targets than did currently religious individuals, and their levels of intuitive moral prejudice toward never religious people were very similar to the rates of never religious individuals. These findings suggest that religious dones view religious nones as part of their ingroup. Study 3 indicated that dones were more likely to express implicit prejudice against currently religious targets than coreligionists. Study 4 provided compelling behavioral evidence for the group affiliation patterns by examining self-sacrificial behavior: Religious dones sacrificed more for never religious individuals relative to currently religious individuals. In Studies 5 and 6, we found that religious dones consistently viewed never religious individuals favorably, at similar levels to other religious dones and more favorably than currently religious targets. Dones expressed greater trust and less prejudice toward never religious individuals compared to currently religious individuals and more strongly consider them to be part of their ingroup. Taken together, religious dones seem to align themselves with never religious individuals—their inward motivations match their outward nonreligious identity. Once religious dones shifted their religious identity, they began to make group-affiliative decisions that reflected their current identity rather than their previous religious identity.

Table 2
Summary of Key Findings

Study	Operationalization of ingroup preference	Research question #1: Affiliative tendencies of dones	Research question #2: How are dones perceived by others?
1	Cyberball (inclusion/exclusion)	Dones exclude Christians and include atheists	N/A
2	Conjunction fallacy (prejudice)	Dones report attenuated antiatheist bias relative to coreligionists	<ul style="list-style-type: none"> • Currently religious demonstrate attenuated bias against dones • Nones view dones like other nones
3	Conjunction fallacy (prejudice)	Dones report more bias toward currently religious targets than coreligionists	<ul style="list-style-type: none"> • Currently religious demonstrate attenuated bias against dones • Nones view dones like religious targets
4	Reducing compensation (sacrifice behavior)	Dones sacrifice most for nones	<ul style="list-style-type: none"> • Currently religious sacrifice for dones, similar to other coreligionists • None sacrifice the least for dones
5	Feeling thermometers	Dones prefer dones and nones	<ul style="list-style-type: none"> • Currently religious prefer religious, followed by dones and nones • Nones prefer nones followed by dones and currently religious
6	Feeling thermometers	Dones prefer dones and nones	<ul style="list-style-type: none"> • Currently religious prefer religious, followed by dones and nones • Nones prefer nones followed by dones and currently religious

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But how are religious donees viewed by others? Addressing our second research question, our studies suggest that donees are perceived as in the middle between the currently religious and never religious. They are more favored by currently religious than never religious targets, though never religious participants do not view religious donees as part of their ingroup (with the exception of Study 2). Studies 2 and 3 revealed that currently religious individuals demonstrated an attenuated bias against religious donees relative to those who were never religious. In Study 4, currently religious individuals were significantly more likely to sacrifice for religious donees than never religious individuals—on the same level as other coreligionists. Never religious individuals, who received greater sacrificial behavior from religious donees, did not reciprocate such behavior; in fact, they sacrificed the least for religious donees, including significantly less than for the currently religious. Study 5 revealed that currently religious individuals favor donees more than never religious individuals and view donees as likely to become more religious in the future, which might account for their positive sentiment. Perhaps they imagine that the donees will eventually re-identify as religious and rejoin their group. The never religious, however, still demonstrate an ingroup bias and prefer never religious individuals, though they are warmer toward donees than the currently religious. However, the type of donee one is thinking about matters: In Study 5, never religious individuals were less likely to trust and include in their ingroup believing or deconverted donees—any current or prior belief was enough to generate a lack of trust and group exclusion, which led to greater prejudice. In Study 6, never religious participants were less likely to trust and include believing donees, whereas they were more likely to trust and include atheist donees—those who never believed—suggesting the powerful role that belief plays in perception of donees.

We note that Studies 5 and 6 intended to disentangle belief and identity. Prior work by [Cohen and Hill \(2007\)](#) has highlighted how different religions that vary individualism-collectivism may emphasize different aspects of religiousness (e.g., belief vs. belonging). Accordingly, the interactive effects found in Studies 5 and 6 may be further moderated by an individual's religious affiliation. To be sure, future work that also clarifies a participant's religious beliefs, in addition to their self-reported religious identity, would be valuable.

This work provides an important advancement and clarification for the religious residue hypothesis. Prior work on religious donees has examined how religious attitudes, values, and behaviors linger in formerly religious individuals after deidentification (e.g., [DeWall & Van Tongeren, 2022](#); [Van Tongeren, DeWall, Chen, et al., 2021](#); [Van Tongeren, DeWall, Hardy, & Schwadel, 2021](#)). Each of these domains was strongly influenced by one's enduring religious schema, habits, and socialization. The research here provides a valuable boundary condition for that effect and reveals that when assessing group affiliation, shifts in religious (social) identity produce relatively more pronounced differences; that is, although religious psychology may persist, viewing oneself as religious more quickly fades. And as one's identity goes, their affiliative behaviors follow. To us, such a shift makes good sense—given the central importance of belonging and social inclusion (e.g., [Baumeister & Leary, 1995](#)), perhaps religious donees prioritize finding a new social group with which they can affiliate and may send signals to such groups (e.g., inclusionary and sacrifice behaviors) to communicate their trustworthiness and willingness to join that group.

Yet perceptions of donees—how other groups view donees—are tinged with religious residue. That is, religious participants more strongly favored and viewed as their ingroup religious donees relative to never religious targets, suggesting they still perceived a dimension of their religiousness persisting. However, never religious participants viewed religious donees as still a bit more “religious,” distancing them to a greater degree than irreligious people who never identified. And never religious individuals did not trust or include in their ingroup believing donees (Studies 5 and 6) and were wary of deconverted donees (Study 5), though they were more trusting of nones who never believed (Study 6). Indeed, this suggests that religious donees are seen, metaphorically, as a sheep in wolf's clothing—others perceive some inward religiousness persisting despite an outwardly nonreligious identity.

However, intrapersonally, the persistence of religious psychology and perceived belief, coupled with a new (and perhaps discordant) view of their identity (i.e., nonreligious self-concept), opens the interesting possibility that religious donees may experience increased levels of cognitive dissonance. Formerly religious individuals may view themselves as no longer religious, although their internal processes still show signs of residual religious remnants (e.g., more positive implicit and explicit attitudes toward God; [Van Tongeren, DeWall, Chen, et al., 2021](#)). Moreover, religious individuals may continue to see religious donees as part of their group, whereas the group they desire to be included in the most—never religious individuals—do not reciprocate that same inclusion or trust. The discrepancy between how they view themselves (as nonreligious), their psychology (still somewhat religious), and their social belonging (favored by religious individuals but mistrusted and excluded by other nonreligious individuals) may be particularly unsettling. Research that explores how such features of religious deidentification play a role in physical and mental health would be useful (e.g., [McLaughlin et al., 2020](#)).

Implications

These findings have implications for research on religious identity, health, and antisocial and prosocial behavior. Of particular importance, these findings add to a growing literature on the psychology and behavior of people who do identify as nonreligious ([Mercier et al., 2018](#); [Norenzayan & Gervais, 2013](#); [Shariff et al., 2014](#); [Zuckerman et al., 2016](#)). With increasing numbers of people transitioning from religious to nonreligious identities (see [Pew-Templeton, 2015](#), for estimates), the current investigation underscores some of the challenges that religious donees may face. Religious donees occupy a unique psychological and behavioral space, in which they identify with and act kindly toward religious nones, and de-identify from and act more harshly toward currently religious people. The downside is that religious donees receive kindness, inclusion, and trust from those whom they perceive as their outgroup (currently religious people) and indifference, mistrust, and rejection from people whom they perceive as their new ingroup (religious nones). The broader implication is that religious donees may have unexpected problems in their social relationships because those whose acceptance they crave may approach them with wariness and mistrust, whereas those from whom they seek distance may continue to welcome them with warmth and acceptance.

Our findings may also have implications for the health of religious donees. Religiousness and social inclusion are consistently related to

better health and longer living (Mueller et al., 2001; Yang et al., 2016). By transitioning to a nonreligious identity, religious dones may experience worse physical health because they have distanced themselves from the group that accepts them (currently religious people) and desire acceptance from the group that rejects them (religious nones). Future work should explore this possibility.

A final implication is that religious dones may not experience the fruits of group membership because they are in the middle between currently religious and never religious individuals. Although religious dones perceive themselves as members of the larger group of religious nonbelievers, they may fail to capitalize on the importance of identity stability. Just as it takes time to build trust in new relationships, the benefits of group membership may come after a period of time with a stable group of individuals who share a common identity. Being in a transitional identity may incur social costs. Understanding this, religious dones may benefit from realizing that religious nones may not accept them as group members as quickly as they wish, and developing enduring social relationships takes time. Others may not embrace their identity change as they do.

Limitations and Future Directions

The current studies provided consistent evidence regarding how people with stable and transitional religious identities view and behave toward one another. Despite these mostly replicable findings, some limitations exist that warrant future investigation. First, in our studies, we did not examine whether religious dones had recently de-identified or whether their deidentification had occurred a long time ago. The effects of religious deidentification tend to be strongest the closer people are to their deidentification experience (Van Tongeren, DeWall, Hardy, & Schwadel, 2021), which may be an important moderator to our findings.

In addition, our studies, though experimental in nature, were cross-sectional in time (i.e., only one time point), which leaves unanswered questions that could only be answered with a longitudinal sample. For example, might religious dones' lack of acceptance from religious nones predict a greater likelihood of reidentifying as religious over time? Although there is some longitudinal work on religious deidentification in an adolescent sample (Van Tongeren, DeWall, Hardy, & Schwadel, 2021), future longitudinal studies may explore this possibility. Moreover, our studies were conducted in the United States, which is a predominately religious culture. Prior research has shown consistency between religious dones' psychology and behavior in secular Western and Eastern cultures (Van Tongeren, DeWall, Chen, et al., 2021), but future work may examine the cross-cultural generalizability of the current findings, especially in societies where group membership and affiliative behaviors are affected by a variety of cultural forces (e.g., comparing countries with predominantly interdependent vs. independent self-construals).

Another limitation is that in Study 4, the currently religious participants said the religious questions were "cool," whereas religious dones and nones said the religious questions were "strange" or "odd," which could have accounted for some of the findings. Although this was done to enhance believability, future work could use prompts with as parallel language as closely as possible. Finally, more work should address why exactly religious dones are quick to favor never religious individuals, including showing

significantly greater sacrifice behaviors (Study 4) while derogating and excluding their former group of coreligionists. We might speculate that doing so could either operate as an external social signal to their new group (religious nones) or perhaps as an internal compensation for having left their previous group. To be sure, research from symbolic self-completion theory and uncertainty-identity theory might be well suited to explore these processes. We encourage such future work.

We see the need for additional avenues for research in two more primary domains. First, work on religious deidentification should be situated within research on identity change and transitional identities more broadly. It is an empirical question whether individuals who change other features of their identity (e.g., political allegiance, social class) demonstrate patterns of identity-related residue or may hold affiliative tendencies in ways that resemble the findings revealed here. Although some have argued that religion is a particularly unique identity (Ysseldyk et al., 2010) and exerts strong schematic effects (McIntosh, 1995), exploring other identity-related changes may offer clues regarding ways in which religious deidentification is distinctive or may operate similarly in relation to a larger constellation of self-related changes.

Second, we see the potential for additional work within religious deidentification to more fully examine the four components of religious deidentification (Van Tongeren & DeWall, 2021). Specifically, by examining individual features of leaving religion—including disbelieving, disengaging, discontinuing, and disaffiliating—future research can provide sharper clarity regarding the processes involved in religious transition. It is possible that for some, (dis)belief is primary; perhaps for others, disaffiliation looms larger. Moreover, how does the individual experience of religious deidentification (i.e., disbelieving) differ from perceptions of those who have deidentified along these dimensions (i.e., evaluations of disbelievers who are still in religious communities vs. disaffiliates who still believe)? These aspects may impact the affiliative patterns observed here—for example, disbelieving leading to stronger identity changes than disengaging. Studies 5 and 6 sought to disentangle belief from identity, but this work only constitutes a modest start. We see this theoretical framework as a fruitful area of future inquiry.

Conclusion

Religious identity waxes and wanes over the life span. Some people are stably religious, some are stably nonreligious, others leave their religious identity behind, and still others may find their way back to identifying as religious. Our findings add novel evidence that transitioning from a religious to a nonreligious identity places people in a psychological middle ground, in which they distance themselves from those who accept them and approach those who reject them. Rather than being viewed as a wolf in sheep's clothing, religious dones are viewed by both currently religious and never religious individuals as *a sheep in wolf's clothing*: still inwardly religious though outwardly projecting a nonreligious identity. And they are treated by both groups as such, which has social costs for religious dones, who desire to be accepted by other cononreligionists and distance themselves from religious people. By understanding the social consequences of religious deidentification, people can better prepare themselves for the social benefits and costs that will accompany their religious transition.

Context Paragraph

This work advances a recent line of research on *religious residue*, which is the idea that religious psychology and behavior persist even after people stop identifying as religious. We were struck by the realization that despite considerable variability, most research treated nonreligious individuals as a homogeneous category. Prior work did not differentiate between previously religious individuals and those who were never religious. Given the potent effects of religion, we wondered if there were any lingering effects of having once been religious. We launched this line of work with several large cross-cultural studies to demonstrate the basic effect (Van Tongeren, DeWall, Chen, et al., 2021). Then, we turned to see the extent of this religious residue effect in several domains: moral attitudes (Van Tongeren, DeWall, Hardy, & Schwadel, 2021), values (Schwadel et al., 2021), and consumer behavior (DeWall & Van Tongeren, 2022). This article extends that line of research to examine how religious donees view themselves and are viewed by others within the context of group affiliation or preference. Thus, this article focuses on the more social (rather than intrapersonal) components of the religious residue hypothesis and provides an important boundary condition for this effect.

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