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Fundamental(ist) Attribution Error: Protestants are Dispositionally Focused

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Abstract

Attribution theory has long enjoyed a prominent role in social psychological research, yet religious influences on attribution have not been well studied. We theorized and tested the hypothesis that Protestants would endorse internal attributions to a greater extent than Catholics, because Protestantism focuses on the inward condition of the soul. In Study 1, Protestants made more internal, but not external, attributions than did Catholics. This effect survived controlling for Protestant Work Ethic, Need for Structure, and intrinsic and extrinsic religiosity. Study 2 showed that the Protestant-Catholic difference in internal attributions was significantly mediated by Protestants’ greater belief in a soul. In Study 3, priming religion increased belief in a soul for Protestants but not for Catholics. Finally, Study 4 found that experimentally strengthening belief in a soul increased dispositional attributions among Protestants, but did not change situational attributions. These studies expand our understanding of cultural differences in attributions by demonstrating a distinct effect of religion on dispositional attributions.

Keywords: Attribution, Religious differences, Belief in a soul
Fundamental(ist) Attribution Error: Protestants are Dispositionally Focused

Thomas McIlvane was a postal worker in Michigan who lost his job and was unable to appeal the decision. Soon thereafter, he shot his supervisor, several coworkers, other bystanders, and himself. Why would an individual engage in such behavior? There are many possibilities. Attribution theory, one of the cornerstones of the study of social cognition, concerns people’s explanations for behavior. Usually, attributions are divided into two broad categories. If you think that McIlvane acted as he did because of something about him as a person, this is an internal (or dispositional) attribution. On the other hand, if you think that McIlvane’s behavior was due to circumstances external to him as a person, or that the situation, other actors, or context might have elicited the behavior, you are making “external” or “situational” attributions (Heider, 1958; Jones & Nisbett, 1971; Kelley, 1971).

Social psychologists had long thought that individuals have a strong, but often erroneous, tendency to attribute behavior to others’ personalities and dispositions, ostensibly because the actor’s behavior swamps the perceptual field. This tendency to overuse internal attributions, and to underuse external attributions, has been dubbed the fundamental attribution error or correspondence bias – an error or bias due to the failure of people to appreciate the power of the situation (Jones & Nisbett, 1971; Pronin, Gilovich, & Ross, 2004; Ross, 1977; Ross & Nisbett, 1991). This view of attribution was unchallenged until research demonstrated that members of certain ethnic cultures (e.g. East Asians) were less prone to these errors in social cognition than were North Americans (Choi, Nisbett, & Norenzayan, 1999; Morris & Peng, 1994), ostensibly because East Asians are more likely to engage in holistic thinking (Choi, Koo, & Choi, 2007; Nisbett, 2003; Nisbett, Peng, & Norenzayan, 2001) or because they have an interdependent sense of self (Markus & Kitayama, 1991; Triandis, 1995).

Religious Differences in Attribution

While the effects of East versus West national cultural identities on attribution have been well-explored, other cultural influences on attribution have not been well studied. However, this
is an important new direction for work on culture and attribution. Recent work on religion and attribution has begun to document differences in attributions to fate according to both ethnicity and religion. East Asian Canadians were more likely than European Canadians, and Christians were more likely than non-Christians, to attribute events to fate. For Christians, this was due to greater religious devotion, but for East Asians, more holistic thinking (Norenzayan & Lee, 2010). There is a dearth of literature investigating how religious beliefs and cultural identities might influence other kinds of attribution — and none that address religious variation in the tendency to commit the fundamental attribution error. In the present research, we focus on religious group differences in attributions. Specifically, we predicted that Protestants may be particularly dispositionally inclined in their attributions, compared to Catholics. Further, we theorized that this difference is because of a greater belief in a soul among Protestants.

**Belief in a Soul**

The concept of a soul is rooted in both the Hebrew, *nefesh*, and the Greek, *psyche*, meaning “breathing” creature. Although the same word is used for both animal and human, the term soul, as presented in the Scriptures, indicates the inner nature and entire personality of a human as it proceeds from God (Unger, 1988/1957). In Abrahamic religions (e.g., Judaism, Islam, and Christianity), the idea of the soul may have added metaphysical meanings associated with religion, morality, or the afterlife (Bering, 2006).

The concept of the soul became particularly important in Western thought with the Greek philosophers who tried to resolve the logical problem of changes they observed across time (Brown, Murphy, & Maloney, 1998; Martin & Barresi, 2006). The question was: How could a person be both the human who attended the theatre last night as well as the being that will, for example, travel to Rome next month? There were three solutions. Atomists held a material view that individual change occurred as atoms came together, remained stable for a time, and then moved apart. There was no need for an ethereal component to explain human phenomena. Aristotle argued, instead, that there must be a changeless, but not necessarily immortal,
principle (i.e., the Aristotelian ‘form’) within humans. However, the Platonic view, similar to (or adopted by) the early Christians, was that there was an essential self, a psyche, or soul, which primarily resides in a changeless realm, a spiritual dimension (i.e., the Platonist ‘Idea’), in which the soul is immortal.

In Western thought, these three differing notions of the soul have a long history. The writings of the early Christian leaders such as the Apostle Paul, Justin Martyr, Augustine, and Thomas A. Kempis, each reflected Aristotelian or Platonist explanations of the soul (Brown et al., 1998; Turner, 1911). These church fathers elaborated on the importance of the cultivation of inward virtue, the concept of an ideal (Christ-like) human, and the possibility of the afterlife of the soul in another realm. The apostle Paul writes, “Though the outward man perish, the inward man is renewed day by day” (2 Corinthians 4:16).

In the medieval period of Western history, the Holy Catholic Church had become virtually the only religion in Western Europe. The clergy, alone, had access to the scriptures, the papacy had become corrupt, and sins and souls were atoned for by payment to the church (Hopfe & Woodward, 2004). Thus, in 1517, Martin Luther posted his theses on the door of the Catholic Church in Germany, declaring that individuals were able to relate directly with God, without the mediation or intercession of the institutional church and its clergy. These so-called Protestants had been handed a fearsome mandate by Luther. They as individuals, and not the Church, were now responsible for the condition of their own souls (Williams, 2002).

John Calvin’s teachings strengthened the Protestant focus on personal salvation and spiritual growth and these beliefs have often been cited as contributing to the legacy of individualism in America (e.g. de Toqueville, 1969; Hopfe & Woodward, 2004; Weber, 1958/1988; Williams, 2002). Among the early American settlers, for example, great care was taken to record one’s conversion narrative, internal religious experiences, and phases of spiritual growth in order to “prove” one’s salvation and good standing with God. The focus on individual salvation gained momentum in later American Protestant revivalist movements with
an increasing emphasis on emotional conversion experiences and the internal sense of being “saved” or “born again”.

We suggest that for religious people and, for Protestant Christians especially, the soul is very much a salient concept and that belief in a soul promotes a tendency to attribute behavior to dispositions, not situations. For Protestants, the soul is commonly emphasized. The pastorate is defined as the “care of souls” (Johnson, 2007; Moreland, 2007), and Horatio G. Spafford’s (1828-1888) hymn, *It is well with my soul*, has been recorded by at least six different Christian music groups in the past decade. Consequently, we hypothesized that belief in a soul may be especially salient and meaningful to Protestants for three reasons: (1) the adherence to a belief that psychological states continue after death necessitates belief in some form of mind-body dualism (e.g., Bering, 2006); (2) the unique emphasis on individual attainment of salvation by faith rather than ritual participation remains a fundamental doctrine in Protestant Christianity (e.g., Cohen, Siegel, & Rozin, 2003; Williams, 2002); and (3) Protestant Christians’ reliance on the Scriptures as the word of God may provide reinforcement for religious beliefs regarding the soul. Protestants are not the only religious groups to believe in a soul, of course--but their beliefs about souls are in some ways different from those in other religions, in ways that we propose have implications for dispositional attributions.

Indeed, we propose that this notion of the soul is different enough even from Catholic views of the soul that Protestants, to a greater extent than Catholics, will show an increased tendency toward internal attributions, and that this will be mediated by belief in the soul. Although all forms of Christianity – including Catholicism and Protestantism-- teach that Jesus Christ is Savior, the role played by individual persons versus reliance on church rituals is widely diverse. Since the Protestant Reformation, most non-Catholic Christians believe, for example, that repenting of one's sins and trusting in Jesus Christ as Savior will assure rewards in the afterlife. This “inner” form of religion, described by the sociologist Max Weber (1993/1922; 1988/1958) and later measured as intrinsic religiosity by Allport and Ross (1967) and Gorusch
and McPherson (1989), is typically contrasted with both intrinsically and “extrinsically” motivated Catholicism with its more eclastical requirements for salvation (Cohen, Hall, Koenig, & Meador, 2005). While inward devotion remains important for the Catholic, participation in the sacraments as well as recognition of papal authority and priestly mediation are central in attaining salvation. The Catechism of the Catholic Church (1995), for example, lists 54 entries for “sacraments” or “sacramentals” but only six entries for the word “soul.”

Thus, although many religious groups recognize the existence of the soul, Protestant Christians may place special emphasis on the inward state and beliefs of the individual (i.e., orthodoxy) rather than the rituals, ethnicity, or governance of the community (i.e., orthopraxy; Cohen et al., 2003; Cohen, et al., 2005; Cohen & Hill, 2005). The late Christian theologian Friedrich Schleiermacher (1768-1834) summed up the inward nature of his faith tradition, “[It] springs necessarily and by itself from the interior of every better soul, it has its own province in the mind in which it reigns sovereign, and it is worthy of moving the noblest and the most excellent by means of its innermost power and by having its innermost essence known by them” (Schleiermacher; 1988, p. 17). It is our hypothesis that enduring Protestant teachings and beliefs about the soul result in an attribution style for that group that is distinct even from those of Catholics.

**Overview of the Present Research**

Given this theological and historical overview, our goal was to investigate whether and how history and theology shape the existing psychological tendencies of people who are influenced by and who make up those cultures (Cohen, 2009). Prior work shows that such theological and cultural differences between members of different religious groups includes differences in domains including relationality in work contexts (Sanchez-Burks, 2002), moral judgment (Cohen & Rozin, 2001), religiosity (Cohen, et al., 2003) and forgiveness (Cohen, Malka, Rozin & Cherfas, 2006). Our driving research question here is similar, as we investigate
how history, culture, and theology of religious groups shape psychological processes—in this
case, attribution.

Would we expect that Protestants, relative to Catholics, endorse greater internal
attributions, lesser external attributions, or both? Although it may seem intuitive that internal
and external attributions are logical opposites (Heider, 1958), there is evidence that they can be
independent (Kashima, 2001). That is, for a person to say that a behavior is caused by internal
factors is not to say that the person does not also see situational influences on that behavior.
More specifically, when confronted with a behavior, North Americans seem to first make a
dispositional attribution and then adjust that attribution based on awareness of contextual
factors (Gilbert & Malone, 1995; Krull, 1993; Trope, 1986). Therefore, in these studies, we
make separate predictions regarding internal and external attributions. We hypothesize that
Protestants will prefer internal attributions to a greater extent than will Catholics, because the
soul is internal to the person. In addition, lay beliefs of the soul suggest people ascribe purpose
and intentionality to behaviors (Bering, 2006). On the other hand, there is no reason to suspect
Protestants will make more or less external attributions than Catholics; thus, we do not expect to
find any difference in external attributions between these religious groups.

To summarize, we assert that being raised in Protestant religion, even compared to
Catholic religion, results in distinct cultural representations. Among these representations for
Protestants is a strong belief in individual souls. This belief in (or representation of) a soul then
leads Protestants to endorse internal attributions to a particularly high degree. Thus, in the
present studies, we investigate the extent to which Protestant religion exerts a distinct influence
on attributions, and the process by which this occurs. In all of these studies, we compare
Protestants to Catholics, which we believe yields a rigorous and conservative test of our
theorizing that historical and theological concerns about the soul continue to exert an influence
on Protestants’ social cognition today.
In Study 1, we test the hypothesis that Protestants will prefer internal attributions more than Catholics, even when controlling for a number of potential confounds—Need for Structure, Protestant Work Ethic, and Intrinsic and Extrinsic Religiosity. We predict no such difference for external attributions. In Study 2, we will again test whether Protestants make more dispositional attributions compared with Catholics, and further whether belief in a soul mediates this effect.

Although correlational tests of mediation are commonly used in social psychological research, experimental tests are more rigorous (MacKinnon, 2008; Spencer, Zanna, & Fong, 2005). In Study 3, we seek to experimentally demonstrate the link between Protestant (vs. Catholic) religion and belief in a soul by use of a priming manipulation. Finally, to garner further support for belief in a soul as a driver of Protestants’ dispositional attributions, we manipulate belief in a soul in Study 4. If belief in a soul actually mediates Protestants’ dispositional bias, then experimentally strengthening belief in a soul should cause Protestants to become more dispositionally focused.

**Study 1**

In this study we examine the internal and external attributions of Protestants and Catholics. We also sought to rule out plausible but theoretically irrelevant confounds—Need for Structure, Protestant Work Ethic, and intrinsic and extrinsic religiosity. Thus, we seek to provide evidence for Protestant’s greater tendency to make dispositional attributions compared to Catholics, and dispel criticism that this religious difference is simply an artifact of other psychological processes or tendencies that are not of current theoretical relevance.

One potential confound in our study is that Protestants could be more cognitively rigid—valuing structure and clear answers, rather than being able to entertain and tolerate ambiguity (Barrett, Patock-Peckham, Hutchinson, & Nagoshi, 2005; Cohen, Shariff, & Hill, 2008; Hunsberger, Alisat, Pancer, & Pratt, 1996). A relatively greater need for structure could relate to focusing on the individual when explaining behavior, rather than taking a more holistic approach, and focusing on how an individual's behavior is caused by contextual factors. We
measured such tendencies with the Need for Structure scale (Neuberg, Judice, & West, 1997).

Another confound which might be greater among Protestants than Catholics is the value of hard work — the Protestant work ethic (PWE). Weber (1988/1958) claimed that Protestantism promoted capitalism because the status of one’s soul as saved or damned (preordained in Calvinist theology) could be gleaned from one’s earthly prosperity (see also Sanchez-Burks, 2002). Nowadays, however, treatments in the social sciences of the Protestant work ethic focus on the value of hard work, which is quite distinct from notions about the status of the soul and other of its original theological underpinnings (Christopher, Zabel, Jones, & Marek, 2008; Miller, Woehr, & Hudspeth, 2001). For this reason, we treat PWE as a potential confound, and not as an explanation of any effects.

In this study, we also used measures of intrinsic and extrinsic religiosity (Gorsuch & McPherson, 1989) to rule out the possibility that it is some general aspect of religiosity among Protestants that explains their particularly dispositional attributions.

Method

Participants. Participants were 233 students from a large public university in the southwestern United States. There were 102 Catholics (42 men; 62 women) and 131 Protestants (41 men; 90 women). Participants were allowed to select more than one ethnicity. Three Catholics were Asian American, 1 Catholic was African American, 34 Catholics were Hispanic, and 69 Catholics were Caucasian. For Protestants, 5 were Asian, 5 were Asian American, 15 were African American, 11 were Hispanic, 4 were Native American, and 95 were Caucasian.

To verify that religious group was not confounded with other demographic variables, we ran correlations between them (coding Caucasians as 0 and every other ethnicity as 1 for ethnicity). Results revealed no significant relationship between religious group and either sex ($r = .08, p = .21$) or ethnicity ($r = .05, p = .42$).

Procedure. Measures of attribution were borrowed from Kitayama, Imada, Ishii,
Takemura, and Ramaswamy (2006). Four short scenarios were presented probing attributions for both moral and immoral behaviors. Participants were presented with the scenarios and asked to rate statements about internal and external attributions. A sample scenario was “Sara Martin is a top executive at a pharmaceutical company that recently developed a new and expensive drug for treating malaria. Shortly after the company developed the drug, there was a significant outbreak of malaria in Africa. In response, Sara Martin decided to donate a lot of medicine to the countries in Africa needing assistance.” In addition to this positive scenario, there was another positive scenario in which the protagonist, a professional baseball player, donated his time to hold baseball camps for poor children. And, there were scenarios about two negative behaviors—a doctor who hid a mistake that led to a patient’s death, and a municipal official who took bribes or kickbacks.

These scenarios have the advantage for the present research of having moral connotations, with two positive and two negative scenarios. Because our theoretical perspective that it is the Protestant concern with the nature of the individual soul (likely to be saved or damned) that would drive differences in attributions, we selected morally charged scenarios that could be seen as being diagnostic about the condition of the soul.

On seven point scales, for each scenario, participants rated agreement with two items reflecting internal attributions and two items that reflected external attributions (one an attribution per se, and the other a counterfactual that behavior would be different if the individual’s features or the situation had been different). For example, we asked people to rate their agreement with the following sentences: “Features of Sara Martin (such as her character, attitude, or temperament) influenced her behavior (donating malaria medicine to countries in Africa needing assistance)” and “Sara Martin would have acted differently if her features (such as her character, attitude, or temperament) had been different” versus “Features of the environment that surround Sara Martin (such as the social atmosphere, social norms, or other contextual factors) influenced her behavior (donating malaria medicine to countries in Africa
needing assistance)" and "Sara Martin would have acted differently if features of the
environment that surround her (such as the atmosphere, social norms, or other contextual
factors) had been different." The reliability was good for both the external ($\alpha = .72$) and internal
($\alpha = .81$) attribution scales.

We measured Need for Structure (Neuberg, et al., 1997) to examine the possibility that
Protestants and Catholics could differ in rigid or dogmatic thinking, which could relate to
attributions. Need for Structure reportedly has two subscales, Desire for Structure (4 items,
sample item: I enjoy having a clear and structured mode of life), and Response to Lack of
Structure (7 items, sample item: I become uncomfortable when the rules in a situation are not
clear). In this sample, these two subscales were highly correlated, ($r = .50$), and we did not
have different predictions about the two subscales. In the interest of parsimony we thus
combined them into one scale, which we will refer to as Need for Structure.

We measured Protestant Work Ethic with 19 items from Mirels and Garrett (1971).
Sample items are: "Our society would have fewer problems if people had less leisure time" and
"If one works hard enough he is likely to make a good life for himself." We dropped one item
because of a typographical error (we inadvertently presented "Most people spend too much time
in unprofitable amusements" as "Most people spend too much time in profitable amusements."
We combined all items into a Work Ethic scale (consistent with one factor reported by Mirels &
Garrett, 1971).

We also measured intrinsic and extrinsic religiosity (Gorsuch & McPherson, 1989). Intrinsic religiosity is usually seen as reflecting ultimate goals, and as internalized, mature
religious motivations. Extrinsic religiosity is often taken to relate to an instrumental, immature
use of religion, such as for social contacts (Allport & Ross, 1967). Given that intrinsic religiosity
theoretically is about sincere religious motivation, one could theorize that the value that
Protestantism places on intrinsic religiosity could be an explanation for differences in patterns of
attributions. We do not take this approach for several reasons. One is the criticism that the guiding theory behind these constructs may be only apt in an American, Protestant cultural context, and less applicable among Catholics given Catholics’ greater emphasis on communal religion (Cohen, et al., 2005). Indeed, intrinsic and extrinsic religiosity were correlated in very different patterns among Protestants (negatively correlated), Catholics (uncorrelated), and Jews (positively correlated), in a study by Cohen and Hill (2007). Furthermore, it is not especially clear on the basis of inconsistent factor analytic properties or on the basis of face validity that intrinsic religiosity measures sincere religiosity as an ultimate goal or that extrinsic religiosity measures insincere religiosity as a means to an end (Pargament, 1992). We feel we are on safer ground treating these items as rather general indications of religiosity, and we therefore treat these as covariates.

Results and Discussion

We first calculated correlations between religious group (Protestant versus Catholic) and potential confounds. Protestants were higher than Catholics in intrinsic religiosity ($r = .14$, $p < .05$), marginally in extrinsic religiosity ($r = .11$, $p = .10$), and not significantly different in work ethic ($r = .03$, $p = .68$), or need for structure ($r = -.07$, $p = .28$). We control for these variables in our analyses below, to make sure that differences in attribution are not due to variations between religious groups in these confounds to yield a very conservative comparison between Protestants and Catholics.

Because we made a priori directional predictions regarding religious group and internal attributions, we report one-tailed tests of this hypothesis throughout the paper. In a multiple regression analysis (Table 1), controlling intrinsic religiosity, extrinsic religiosity, work ethic, and need for structure, being Catholic versus Protestant had a significant effect on internal attributions ($b = 0.20$, $SE = 0.12$, $\beta = .12$, $p < .05$). In a similar regression analysis, consistent with our hypotheses, there was no effect of religious group on external attributions ($b = -.06$, $SE = .14$, $\beta = -.03$, $p = .66$).
This study supported our hypothesis that Protestants would endorse internal attributions more than Catholics would and, further, that there is no such difference in external attributions.

**Study 2**

In Study 2, we attempted to replicate the internal attribution differences seen in Study 1 and then examined the mediating role of belief in a soul.

**Method**

**Participants and Procedure.** The participants in this study were 154 Protestants (32 men; 122 women) and 118 Catholics (28 men; 89 women; 1 did not report sex) from a large public university in the southwestern United States. Three Catholics were Asian, 3 Catholics were American Indian, 35 Catholics were Hispanic, 76 Catholics were European American, and 1 Catholic failed to report ethnicity. Two Protestants did not report ethnicity; 99 Protestants were European American; 31 Protestants were African American; 12 Protestants were Hispanic; 3 Protestants were Asian American; 3 Protestants were American Indian; 3 Protestants were Asian, and 1 Protestant reported “other”. Participants received course credit in a sociology course for completing the survey. As in Study 1, we ran correlations between religious group and demographic variables to make sure there was no confound between sex or ethnicity with religious group. Results showed no correlation between religious group and either participant sex ($r = .04, p = .54$) or ethnicity ($r = -.001, p = .98$).

Belief in a soul was measured using eight items, including several reverse scored items ($\alpha = .81$; I believe that every person has a soul; People are not just physical, but they also have a soul; After death, the soul lives on; I do not believe in a soul; Death ends all forms of life forever; Earthly existence is the only existence we have; There is an immortal part of a person; People are no more than a physical body).

Internal and external attributions were measured as in Study 1.

**Results and Discussion**

In a multiple regression analysis, and as in Study 1, Protestants endorsed internal
attributions to a greater extent than did Catholics ($b = 0.24$, $SE = 0.10$, $\beta = .15$, $p = .008$). For mediation analyses, this is the direct path of the independent variable on the dependent variable (Figure 1). Again, there was no effect of religious group on external attributions ($b = 0.15$, $SE = 0.14$, $\beta = .07$, $p = .27$).

We next set out to find whether Protestants had greater belief in a soul than Catholics, which would be the “a” path in our theorized mediation model (from the independent variable—religious group—to the theorized mediator—belief in a soul). Results revealed that Protestants did indeed have greater belief in a soul than Catholics ($b = 0.32$, $SE = 0.13$, $\beta = .15$, $p = .007$).

Controlling for belief in a soul reduced to marginal significance the effect of being Protestant versus Catholic on internal attributions ($b = .15$, $SE = 0.09$, $\beta = .09$, $p = .06$). In addition, belief in a soul had a significant effect on internal attributions, while controlling religious group (our “b” path: $b = .30$, $SE = 0.04$, $\beta = .38$, $p < .001$). A Sobel (1982) test confirmed a significant indirect effect of being Protestant versus Catholic on internal attributions via belief in a soul ($z = 2.32$, $p = .02$). These analyses satisfy all the conditions for partial mediation (Baron & Kenny, 1986).

Thus, in Study 2, we replicated our finding from Study 1 that Protestants are more dispositionally, but not more situationally, focused than Catholics. In addition, we found support for the hypothesis that this effect is mediated by belief in a soul.

**Study 3**

Studies 1 and 2 provide evidence for our hypothesis that the activation of cognitive representations of Protestant religion activates belief in a soul, which then leads to internal attributions. In Study 3, we sought to provide experimental evidence for the casual pathway between the activation of cognitive representations of Protestant religion and belief in a soul. Consequently, we primed religious representations among Protestants and Catholics, and
expected to find that belief in a soul would actually increase among Protestants to a greater extent than among Catholics.

Method

Participants and procedure. 68 Catholics (31 males and 37 females) and 75 Protestants (29 male and 45 female and 1 person who did not report sex) ASU psychology undergraduates participated for course credit. Sixty-three percent of the Catholic participants in our sample were European American, and 69% of the Protestant participants in our sample were European American.

We reasoned that religious representations would be accessible among both those who were currently practicing their religion as well as those who had been raised in the Christian religious tradition. Therefore, we counted participants as Catholic or Protestant if they either currently identified themselves as such (n's of 46 and 51), or if they had been raised in a Catholic or Protestant household even if they no longer identified themselves as belonging to those religions (n's of 22 and 24). This also allowed us to overcome potential ceiling effects if people who identify themselves as currently Protestant are highly likely to chronically endorse belief in a soul.

We primed religion by asking participants to write a few sentences about being a member of their faith or tradition. In the control condition, we asked participants to write a few sentences about their hobbies. We then measured belief in a soul using the belief in a soul scale from Study 2 ($\alpha = .92$).

Finally, we asked participants to complete the following scales: Need for Structure (Neuberg, et al., 1997), work ethic (Mirels & Garrett, 1971), and intrinsic and extrinsic religiosity (Gorsuch & McPherson, 1989). These scales were used as covariates in the analyses below.

Results and discussion. There was a main effect of religion, whereby Protestants believe in a soul more than Catholics, replicating our prior findings, $F(1, 135) = 4.10, p = .045$. There was also a significant interaction between prime (religion versus control) and religion.
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(Catholics versus Protestants), $F(1, 135) = 5.01, p = .027$. Protestants who were primed with religion believed in a soul significantly more than Protestants who were in the control condition ($p = .04$) while there was no such difference for Catholics ($p = .26$) (Figure 2). Thus, in support of our hypothesis, priming religion activated belief in a soul to a greater extent for Protestants than for Catholics.

**Study 4**

If belief in a soul is indeed the reason that Protestants are especially prone to making dispositional rather than situational attributions, strengthening belief in a soul should lead Protestants to make even more internal attributions, but should not change external attributions. We tested these hypotheses in Study 4.

**Method**

**Participants and Procedure.** The participants in this study were 55 Protestants at a large, Southwestern, public university. There were 28 men and 27 women. There were 7 Asians, 3 Asian Americans, 9 African Americans, 8 Hispanics, 5 Native Americans, 32 Caucasians and 2 “other.” Participants received partial course credit for filing out the questionnaire.

**Manipulation.** We experimentally manipulated belief in a soul by asking participants to write an essay for or against the existence of a soul. Before they began writing, participants were told “You will be RANDOMLY selected to be either ‘for’ or ‘against’ this issue. Please try to write a convincing essay EVEN IF YOU DO NOT AGREE with the side you were assigned to. The mark of a successful writer is that they can write about any topic convincingly, and we would like to see how well students can do that.”

In addition, we gave participants a few arguments to start off with, to further prime the idea that a soul does or does not exist. For example, we told participants in the “against the existence of a soul” condition that a point they could make in their essay is “after people die, there is no brain activity.” An example we gave to participants in the “for the existence of a soul”
condition is “people often report having after death or out of body experiences.” Then, participants spent around 5 minutes writing about their assigned topic.

Previous research on persuasion suggests that writing an essay for or against a randomly assigned topic can strengthen belief in that topic, even if the opinion is not one that the participant originally held (Cooper, Mirabile & Scher, 2005). Thus, the priming task could experimentally strengthen or weaken belief in a soul, which should already be a belief that exists to varying extents in Protestants.

After writing their essay, participants read and answered questions about the same attribution scenarios as in the previous studies.

**Results and Discussion**

In a regression analysis, our experimental manipulation had a significant effect on internal attributions, $b = 0.72$, $SE = 0.32$, $\beta = .29$, $p = .02$. Protestants who wrote an essay for the existence of a soul made more internal attributions than did Protestants who wrote an essay against the existence of the soul. As predicted, there was no such effect for external attributions $b = 0.14$, $SE = 0.26$, $\beta = .07$, $p = .59$. The results of this study provide further evidence that belief in a soul leads Protestants to make more internal, but not external, attributions.

**General Discussion**

We have argued that Protestant Christians are more likely to offer more internal explanations for behavior, even compared to Catholics. We showed this was so in Study 1, even after controlling for several potential confounds (Need for Structure, Intrinsic and Extrinsic Religiosity, and Protestant Work Ethic).

Our demonstration that Protestants are prone to internal attributions is important because one could imagine that theological and historical differences among religious groups in the U.S. exert little or no influence on people’s current psychological tendencies. Furthermore, given that on some level there is similarity between culture and theology among Catholic
Christians and non-Catholic Christians, this is an especially important finding. We suggest that distal historical and theological circumstances can still be reflected in people’s judgments (Cohen, 2009; Conner Snibbe & Markus, 2002). These results are consistent with other research showing that members of religious groups still differ in theologically determined ways, in domains including work ethic (Sanchez-Burks, 2002), moral judgments (Cohen & Rozin, 2001), the extent to which religiousness depends on practice and faith (Cohen, et al., 2003), intrinsic and extrinsic religious motivation (Cohen & Hill, 2005), and forgiveness (Cohen et al., 2006).

Our findings are also informative because there is a strong alternative theoretical possibility. One could theorize that Protestants may actually be more prone to making external or situational attributions than members of other religions. Despite the fact that Protestantism can be dubbed an individualistic religion inasmuch as it is primarily concerned with individual faith (Cohen et al., 2005), it could also be argued that, historically and psychologically, Protestants were collectivists with a desire to form a community based on codified social norms. In many ways, the Puritan immigrants exemplified collectivist values of being voluntarily bound by mutual covenant to live in community, to establish a proper social order, and to maintain harmony within the community. An individual’s identity was defined not only by personal choice but also by good standing in the religious community, everyone being subject to jeremiads aimed at shuffling stray Christians back into the fold. This collectivistic view of religion recalls to mind Durkheim’s (1912/1995) view that “A religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden – beliefs and practices which united into one single moral community called a Church, all those who adhere to them” (p. 44). Moreover, religion has also been explained as a culturally evolved way to promote cooperation, a solution to the problem of living in large-scale societies of unrelated individuals (Atran & Norenzayan, 2004; Norenzayan & Shariff, 2008; Shariff & Norenzayan, 2007; Sosis & Alcorta, 2003; Wilson, 2002).
Indeed, religious people from many religious traditions, including Protestantism, are more likely to espouse what are viewed as collectivistic values, including tradition and conformity (e.g., Gardner, Gabriel, & Lee, 1999; Schwartz & Huismans, 1995). Using the independent and interdependent self-construal scales of Singelis (1994), Cohen & Rozin (2001) found that interdependence, but not independence, was correlated with religiosity for both Jews and Protestants. Thus, Protestants, who are more focused on tradition, conformity, cooperation, and interdependence, could have been theorized to be more prone to making external, and less prone to making internal attributions than Catholics. However, we found support for the exact opposite prediction – Protestants make more internal, but not external, attributions compared to Catholics.

What is it about Protestant religion that makes people more internally focused? We theorized that this is because Protestants believe more strongly in, and are more concerned about, the condition of souls. In Study 2 we found that belief in a soul partially and significantly mediated differences between Protestants and Catholics in tendencies to endorse internal attributions. One problem with the interpretation of many mediation analyses is that they rely on correlational evidence without evidence of causality (MacKinnon, 2008). Study 3 found that Protestants primed with religion had the highest belief in a soul compared to Catholics and even compared to Protestants not primed with religion. Furthermore, Study 4 found that strengthening belief in a soul increased the tendency of Protestants to provide internal, but not external, attributions. We are confident from the results of these studies that Protestants have greater representations of belief in a soul even relative to Catholics, and that this partially accounts for Protestants’ relatively greater tendency to be dispositionally biased.

Martin Luther introduced the Protestant Christian belief that salvation comes through grace and faith alone, unmediated by a priest or religious institution. Many years later, a persecuted Protestant contingent immigrated to the New World, seeking not only religious freedom but also aiming to build a righteous “City on a Hill” (Morone, 2004). Each later
Revivalist movement, including the fundamentalist and charismatic movements of the previous century, reinforced Protestants’ concern for the status of one’s soul. It seems that this focus on the soul causes Protestants to be more concerned than members of other religions (here, Catholics) with dispositional causes for the behavior of others – often committing what has been termed in the social psychology literature as the fundamental attribution error.

The debate about the soul that began among the Atomists, Aristotelians, and Platonists has not diminished and, indeed, is reflected in the psychological literature today. Although forgotten by some, the term “psychology” is literally translated “the study of the soul” and some early psychologists referred to the field as the study of souls. However, by 1957, Gordon Allport complained, “As every reader knows, modern empirical psychology . . . separated itself sharply with religion. ‘Psychology without a soul’ became its badge of distinction and pride” (p. v).

Today, there is a stirring debate as to whether or not the soul, by any definition, even exists (e.g. Brown, et al., 1998; Martin & Barresi, 2006; Ward, 1992). Moreover, the controversy between the more essentialist view of the person (i.e. having a mind, a unified self, and stable personality traits) and a mechanistic or contingent view of the person (i.e. explaining the self in terms of observable behavior or situational effects) reflects the complex ways people conceptualize both self and soul. In the tradition of the Greek Atomists, some psychologists focus more on the situation, or the automaticity of behavior; whereas others, more in line with Aristotle, Plato, and Protestant Christians, theorize about intrinsic motivations, personality traits, or intentionality as the best explanation for why people do the things that they do. As Conner Snibbe & Markus (2002) have argued, our psychological theories, and the extent to which psychologists attribute behavior to the person or the situational, inevitably reflect our own worldviews. The present studies suggest that psychological research, too, may be influenced by our own beliefs about the existence – or non-existence – of the soul.

Future Directions
We now consider two recommendations for future research, one on the distinction between internal and external attributions, and the other on how religious differences in attribution may relate to research regarding East-West differences.

With regard to the measure of attributions we have used across studies, two directions for future research are warranted. First, we used scenarios that depicted highly moral (e.g. charitable) and highly immoral (e.g. taking a bribe) behaviors. We chose these scenarios because it is our theory that Protestants scrutinize the internal motivations for behavior because they are attempting to gauge the condition of a person’s soul. Moral scenarios seemed well suited to addressing this research question. It would be interesting to discover in future research whether Protestants explain other kinds of behavior (ones that are not moral or immoral) in terms of dispositional or internal determinants. If attribution differences exist for only moral scenarios, this would lend further support to the notion that Protestants make attributions for behavior primarily with an eye toward the moral condition of the soul. If attribution differences also exist for nonmoral scenarios, however, it would suggest that the Protestant tendency to make dispositional attributions is either more general or more multiply determined than just being concerned with the condition of the soul. In other words, the moral attributional outlook may generalize to causal explanations for a broader set of behaviors.

A second future direction for work on religion and attributions has to do with finer distinction between types of attributions. To say that a behavior was driven by a person’s dispositions or internal factors is not necessarily to say that a person was responsible, or agentic, for that behavior (Hilton, Smith, & Kin, 1995; Kashima, 2001; Semin & Marsman, 1994). However, we point to this as an important direction for future research; that is, to see whether Protestants are particularly likely to hold people agenticly or morally responsible for the behaviors which Protestants see as internally or dispositionaly driven.

Our second recommendation for future work concerns the relationship between religion and previously found East-West differences in attributions. Although the present research
focuses on whether North American Protestants are particularly dispositional, it alludes to a broader potential direction for future research -- the relationship between religion and nationality as influences on attribution. Is it possible that some of the attribution findings commonly attributed to East-West differences could actually be due to religious disparities between those countries? In some preliminary research, we found that Hong Kong Protestants were more likely to make internal compared to external attributions than nonreligious individuals or people of other faiths (Li, Johnson, & Cohen, 2009). This implies that Protestants in countries other than the U.S. have similar attribution styles to those in the U.S. On the other hand, the effect of religion can vary in different ethnic groups. For example, religiousness is correlated with political conservatism among Euro-Americans and Asians, but not among African Americans or Latinos, because different values correlate with religiousness in these different groups (Cohen, Malka, Hill, Thoemmes, Hill, & Sundie, 2009). How various cultural identities (including ethnicity, nationality, religion, and others) interact is an important direction for research (Cohen, 2009).

**Broader Theoretical Implications**

Religious ideologies have played an important role in U.S. history and continue to do so today. Approximately 77% of U.S. citizens self-identify as Christian (Pew Forum on Religion & Public Life, 2008), including 49.8% Protestant, 24.5% Roman Catholic, 1.3% Mormon (Latter Day Saints), and 1.1% others. Yet the influence of religion on research outcomes in psychology is often overlooked (Conner Snibbe & Markus, 2002). Over the last century, Christianity in America has developed into a marketplace of ideas with many different denominations and sects as well as professions of being “spiritual but not religious.” One could well imagine, therefore, that members of various religious groups would show similar psychological tendencies, given that the current religious culture and climate in the U.S. would be seen as a homogenizing force and one that reflects people’s individual choices, not their historically descended group identities.
However, the historical roots of Protestantism continue to flourish in America with over 23% of Americans being affiliated with Renewalist (e.g., Pentecostal or Charismatic) churches and over 51% of all Christians being identified as Baptist – denominations that continue to emphasize the internal, personal nature of religiosity (Pew Forum, 2008). We suggest that the beliefs and values of these groups should not be glossed over in social psychological research. Furthermore, it is an important theoretical issue in the study of culture to elucidate whether and how historical and theological developments influence the psychological processes and tendencies of modern members of those religious groups.

Previously, there has been little research on the influence of religion on attribution (but see Norenzayan & Lee, 2010). Differences in attribution between groups were usually compared between Easterners and Westerners and explained by factors such as collectivism versus individualism, or holistic versus analytic thinking. The studies described in this paper, on the other hand, suggest that religious cultural identities strongly and specifically influence whether someone is more likely to make internal attributions.

More broadly, we believe the connection between religion and various cultural processes is vastly underexplored. Though psychology as a field has made commendable strides in cross-cultural research, it is important to consider the possibility that religions also have distinct histories, cultures, and world-views (Cohen, 2009; Johnson, Hill, & Cohen, 2010). Though sometimes difficult to separate, the study of the effects and interactions of varying cultural identities may make unique contributions to the psychological processes we research.
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References


Table 1
Regression results from Study 1, predicting internal and external attributions from religious group (Catholic = 1, Protestant = 2), Need for Structure (“Structure”), Intrinsic religiosity (“Intrinsic”), Extrinsic religiosity (“Extrinsic”), and Protestant Work Ethic (“Work).

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Internal Attributions</th>
<th></th>
<th></th>
<th>External Attributions</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
<td>β</td>
<td>b</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Catholic (1) vs. Protestant (2)</td>
<td>.197</td>
<td>.117</td>
<td>.119*</td>
<td>- .061</td>
<td>.137</td>
<td>-.032</td>
</tr>
<tr>
<td>Structure</td>
<td>-.005</td>
<td>.006</td>
<td>-.057</td>
<td>-.002</td>
<td>.007</td>
<td>-.023</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.003</td>
<td>.008</td>
<td>.024</td>
<td>.002</td>
<td>.009</td>
<td>.019</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>-.008</td>
<td>.008</td>
<td>-.071</td>
<td>.026</td>
<td>.009</td>
<td>.197**</td>
</tr>
<tr>
<td>Work</td>
<td>.009</td>
<td>.006</td>
<td>.108</td>
<td>.006</td>
<td>.007</td>
<td>.069</td>
</tr>
</tbody>
</table>

Note: * p ≤ .05, ** p ≤ .01.
**Figure Legends**

**Figure 1.** The effect of being Catholic versus Protestant on internal attributions is significantly mediated by belief in a soul in Study 2 ($z = 2.32, p = .02$). The effect of being Catholic versus Protestant on internal attributions presented before the slash is the effect without controlling for belief in a soul. The same effect presented after the slash is the effect while controlling belief in a soul. Standardized regression coefficients ($\beta$’s) are presented. † $p \leq .10$. ** $p \leq .01$, *** $p < .001$.

**Figure 2.** In Study 3, Protestants primed with religion (“religion”) have greater belief in a soul than those in a control priming condition (“control”), but Catholics do not differ significantly.
Figure 1

Catholic (1) vs. Protestant (2) → Belief in a soul
Belief in a soul → Internal attributions
Catholic (1) vs. Protestant (2) → Internal attributions

.15** / .09†
Figure 2

![Bar chart showing belief in a soul by religion. Catholics and Protestants are compared under 'Control' and 'Religion' conditions. The chart indicates a higher belief in a soul among Protestants compared to Catholics.]