

There But for the Grace of God: Counterfactuals Influence Religious Belief and Images of the Divine

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Anneke Buffone^{1,2}, Shira Gabriel², and Michael Poulin²

Abstract

Past research suggests that thinking counterfactually leads to a perception that major life events are fated or predetermined. We hypothesized that a perception that events are fated will activate perceptions that God played a role in the event, which will increase feelings of religiousness. Because most people view God as a positive influence, we hypothesized that this would only happen when imagining how events might have turned out worse (i.e., downward counterfactuals). Across two experiments, we examined the hypothesis that thinking counterfactually increases religiosity. The studies supported our predictions. Generating counterfactuals increased belief in God and religiosity across several variables. Furthermore, evidence was found for the proposed pathway. In summary, the studies provided strong and consistent empirical support for counterfactual thinking's role in religious faith and for this effect to be due to increased perceptions of God's role in the event. Implications for religion, cognition, and counterfactual thinking are discussed.

Keywords

counterfactual thinking, religion, attitudes, attribution, interpersonal relationships, counterfactual direction, fate

Psalm 124

2 If the *Lord* had not been on our side when men attacked us,
3 when their anger flared against us, they would have swallowed us alive; (...)

Despite historical trends toward less religiosity, most people still believe in God (Gallup, 2011). The current research is concerned with the age-old question of how believers find evidence in their lives for the existence of God. We propose that counterfactual thinking, (i.e., imagining how life would be different if a given event had not occurred) allows believers to find evidence that God plays a role in their lives.

Counterfactual thinking is defined as “if-then” statements about how a series of events could have had an altered outcome if an event had not occurred or had occurred differently (Roese, 1997; Roese & Olson, 1995). For example, Jane might think, “if I hadn't taken the bus that day, I never would have met my husband.” Thinking counterfactually is a commonly used reflection strategy, with implications for problem solving and affect management (Epstude & Roese, 2008; Roese, 1994). In addition, counterfactual thinking about past autobiographical events increases awareness of unknown causes and surprising connections (Koo, Algoe, Wilson, & Gilbert, 2008) and perceptions of the event being fated (Kray et al., 2010; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001; Sanna & Turley, 1996).

It is the influence of counterfactual thinking on perceptions of fatedness that we propose plays an integral role in increasing religiosity. Merriam-Webster defines fate as “a power that is believed to control what happens in the future” (“Fate,” 2015). Thus, the question arises, if fate implies that some power is controlling the events in one's life, what is that power? Survey research suggests that, for the majority of people in the world today, power is thought to be God (Gallup, 2011). Thus, we propose that when counterfactual thinking leads to an increase in fatedness, that increase in fatedness will lead to an increased perception that God is playing a role in one's life. Finally, a perception that God is playing a role in one's life should lead to increased religiosity.

Support for the role of counterfactual thinking in increasing religiosity comes from practices encouraged by major religions (Bender, 2008). For example, in Catholicism, the Examen encourages reflective prayer each night in order to perceive divine influence in the day's events. Protestant religions have

¹ Department of Psychology, Positive Psychology Center, University of Pennsylvania, Philadelphia, PA, USA

² Department of Psychology, State University of New York at Buffalo, NY, USA

Corresponding Author:

Anneke Buffone, Department of Psychology, Positive Psychology Center, University of Pennsylvania, Philadelphia, PA 19104, USA.

Email: buffonea@sas.upenn.edu

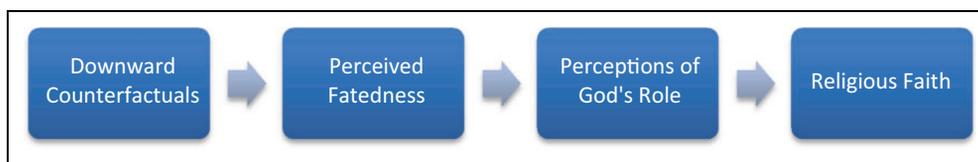


Figure 1. Proposed model for the effects of downward counterfactual thinking on religious faith by way of perceptions of fate and the role of God.

developed programs encouraging believers to journal each night about the day's events to deduce evidence for divine responsiveness (Bender, 2008). The Jewish Passover song and prayer "Dayenu" encourages Jews to find evidence of God's presence by imagining how life would have been different if God had not intervened. In Islam, Mohammed encourages believers to reflect on ordinary events, such as the occurrence of rain, to recognize Allah's benevolence. In Hinduism, believers are encouraged to see everyday occurrences as manifestations of the Divine. In sum, all the current major theistic religions encourage believers to reflect on the events in their lives to find evidence for the existence of God. By imagining how their days might have been different, religious practitioners are able to perceive the ways that God intervened.

The Present Research

Two studies were run to test the hypothesis that downward counterfactual thinking leads to an increase in religiosity.¹ In both studies, a model was tested in which generating counterfactuals leads to a perception of fatedness which leads to a belief in God's role that leads to increased religiosity (see Figure 1).

Pretesting suggested that our participants tend to see God as a benevolent, helpful presence. Specifically, we surveyed 434 participants and found that 71% of participants agreed with "I believe that if there is a God, he is most likely loving and caring and tries to make the best happen for people." In addition, most religions appear to hold up an image of a benevolent deity, the Bible states that "the Lord is kind and merciful" (Psalm 103); throughout the Quran, Allah is constantly referred to as "the merciful, the compassionate"; and in Hinduism, God is the source of happiness and love. Thus, one would predict that evidence for God's hand in believers' lives should be found when imagining how one's life would be worse if an event had not happened (i.e., downward counterfactuals) and not when imagining how one's life would have been if the event had not happened (i.e., upward counterfactuals). Study 1 manipulated counterfactual direction to examine that hypothesis.

Study 1 also examined both positive and negative events. Prior research on counterfactuals most often limits the focus on either positive or, more commonly, negative events, as these are more likely to elicit counterfactual thought (Burrus & Roese, 2005; Mandel & Dhimi, 2005; Roese, 1997). Some work however has found that valence affects counterfactual reflection: Upward counterfactuals are more common in

response to negative events and vice versa (Koo et al., 2008; White & Lehman, 2005). Yet downward counterfactuals can sometimes be generated in response to negative events, especially if individuals are motivated to make sense of a negative event by benefit finding (Helgeson, Reynolds, & Tomich, 2006)—that is, focusing on an event's unexpected positive outcomes or its "silver lining." In fact, religiosity is associated with greater levels of spontaneous benefit finding (McIntosh, Silver, & Worman, 1993), suggesting that downward counterfactual thinking about negative events may fit well with religious belief. Given the conceptual and empirical separability of counterfactual direction and event valence, we expected that imagining alternate—specifically, worse—realities to positive or negative life events should equally make individuals perceive a benevolent God's influence.

Study 1

Method

Participants

We recruited 292 (92 female) undergraduate students² diverse in ethnicity (19 African/African American, 48 Asian/Asian American, 11 Hispanic/Hispanic American, 4 Arab/Arab American, 2 Native American, and 208 European/European American) and belief (22 Jewish, 18 Protestant, 104 Catholic, 4 Lutheran, 32 Other Christian, 10 Muslim, 8 Hindu, 26 Atheist, 22 Nonbeliever, 21 Agnostic, and 23 Spiritual/Nonreligious). Twelve individuals had to be excluded from the analyses due to not following instructions.

Materials and Procedures

While seated in individual cubicles, unaware that the experiment examined religion, participants wrote about a positive or negative life event either upward or downward counterfactually or without the use of counterfactuals, completed a measures of religious faith, measures of fate and whether participants felt the "hand of God" in the event.

Essay task. Participants were instructed to select and describe either an important negative or an important positive event from their past (Kray et al., 2010). Subsequently, one third of participants per group were instructed to write a coherent story about how life would be better (upward) and one third about how life would be worse (downward) if this event had never

occurred. A final third was asked to simply describe the event in more detail.

Questionnaires. Subsequently participants completed the following questionnaires.

Strength of Religious Faith. Participants completed the Santa Clara Strength of Religious Faith Questionnaire (Plante & Boccaccini, 1997) assessed on a 7-point scale (1 = *completely disagree*; 7 = *completely agree*), featuring items such as “I look at my faith as a source of inspiration.”³

Comparative Strength of Religious Faith. Participants were asked “How strongly do you believe in God compared to most other people you know” (1 = *not at all strongly*; 7 = *extremely strongly*).

Perceptions of own religious behavior. We also assessed perceived religious behavior by asking how often participants recalled attending a place of worship (1 = *never*; 7 = *daily*) and how frequently they prayed (1 = *never*; 7 = *several times a day*).

Image of God. We included a shortened version of the God Image Scales (Lawrence, 1997) assessing perceptions of God as an attachment figure.

Fatedness. Further participants completed an item identical to the one used to measure fatedness by Kray and colleagues (2010), asking participants to indicate whether they perceived the event as “a product of fate” as well as an item asking how much the event appeared “meant to be,” both assessed on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*).

Hand of God in Experience. We assessed the degree to which participants felt the influence of God in their event by asking them to indicate, on a 7-point scale, their agreement with the single item “I felt the hand of God in this life experience.”

Results and Discussion

Event Valence

Our primary hypothesis was that downward counterfactual thinking would increase strength of religious faith, perceptions of fatedness, and perceptions of God’s causal influence in the life event compared to both upward counterfactual and factual reflection. We included event valence in our design to see whether effects would differ depending on whether events were positive or negative. Thus, all results were examined with 3 (reflection type: downward counterfactual vs. upward counterfactual vs. factual) \times 2 (event valence: positive vs. negative event) analyses of variance. However, we were only interested in the effects for reflection type, and none of our analyses showed any significant main effects or interactions for event valence. Therefore, for clarity of report, only results for reflection type are reported.

Counterfactuals and Religious Faith

Given the high degree of conceptual similarity among all of the religion items measured (tapping strength of religious faith, comparative strength of religious faith, perceptions of own religious behavior, and images of God), we first examined whether it was defensible to combine all of these items into a single index to avoid capitalizing on Type-I error. We computed a single *Religious Faith Scale* that was the mean of all of the above items, and this scale had excellent internal consistency ($\alpha = .98$) so was used as the single religiosity variable in the following analyses. However, analyses conducted using the above scales separately yielded substantively similar results for each.

We examined effects of the manipulations on our religious faith scale, and in line with predictions, a significant main effect emerged for kind of reflection, $F(2, 274) = 3.88$, $p = .02$, $\eta_p^2 = .03$. Downward counterfactual reflection ($M = 3.90$, $SD = 1.42$) produced marginally higher religious faith than factual reflection ($M = 3.50$, $SD = 1.47$; $p = .06$), mean difference 0.40, 95% confidence interval [CI] = [−0.01, 0.82], and significantly higher religious faith than upward counterfactual reflection ($M = 3.31$, $SD = 1.47$; $p = .007$), mean difference = −0.59, 95% CI = [−0.17, −1.01]. Upward and factual reflection did not differ from one another ($p = .39$), mean difference = −0.19, 95% CI = [−0.61, 0.24].

Mediation by Fatedness and Hand of God

In order to test the hypothesis that downward counterfactuals increased religious faith by increasing fatedness perceptions, which in turn increased belief in God’s role in the event (see Figure 1), we conducted the following three steps. First, we tested whether the contrast of downward counterfactuals versus other conditions predicted each of the proposed mediators, fatedness perceptions, and the hand of God. Second, we tested the indirect effect corresponding to each of the intermediate mediational paths (downward counterfactuals \rightarrow fatedness \rightarrow hand of God; fatedness \rightarrow hand of God \rightarrow religious faith). Finally, we estimated the overall indirect effect corresponding to the total mediated effect (downward counterfactuals \rightarrow fatedness \rightarrow hand of God \rightarrow religious faith).

Downward counterfactuals affecting Fatedness and hand of God. As predicted, downward counterfactuals predicted higher levels of fatedness perceptions ($M = 4.01$, $SD = 1.67$) versus other reflection conditions (upward counterfactuals and factual reflection; $M = 3.56$, $SD = 1.77$; $p = .04$; mean difference = −0.45, 95% CI = [−0.88, −0.01]). In addition, downward counterfactuals predicted higher perceptions of the hand of God in the event ($M = 3.60$, $SD = 1.92$) versus other reflection conditions ($M = 2.82$, $SD = 1.79$; $p < .001$; mean difference = −0.79, 95% CI = [−1.24, −0.32]).

Fatedness mediating the effect of downward counterfactuals on hand of God. Fatedness and hand of God perceptions were significantly correlated ($r = .44, p < .001$). Following guidelines recommended by Preacher and Hayes (2004; see also Zhao, Lynch, & Chen, 2010), we performed bootstrapped estimates of the indirect effect between downward counterfactuals and hand of God by way of fatedness using Stata *sgmediation* and *bootstrap* modules. Results (performed with 5,000 bootstrap samples) indicated an indirect slope greater than 0 (indirect $B = 0.20, 95\% \text{ CI} = [0.001, 0.41], z = 1.97, p = .049$). These results suggest that downward counterfactuals may increase hand of God perceptions by leading to perceptions that the life event is fated.

Hand of God mediating the association between fatedness and religious faith. Fatedness perceptions and religious faith were associated ($r = .30, p < .001$), and unsurprisingly, religious faith and hand of God perceptions were also significantly correlated ($r = .68, p < .001$). As above, we performed bootstrapped estimates of the indirect effect between fatedness and religious faith by way of hand of God. Results (performed with 5,000 bootstrap samples) indicated an indirect slope greater than 0 (indirect $B = 0.25, 95\% \text{ CI} = [0.19, 0.32], z = 7.55, p < .001$). These results suggest that fatedness perceptions may predict religious faith specifically by leading to perceptions of the hand of God.

Testing two-step mediation. Finally, we obtained the overall indirect effect corresponding to the total-mediated effect (downward counterfactuals \rightarrow fatedness \rightarrow hand of God \rightarrow religious faith). To do so, we used Stata's *sureg* (seemingly unrelated regression) command to obtain estimates of all direct and indirect effects and then used the bootstrap command to obtain 5,000 bootstrapped estimates of the overall indirect effect. Results indicated an indirect slope marginally greater than 0 (indirect $B = 0.12, 95\% \text{ CI} = [-0.01, -0.25], z = 1.86, p = .06$). These results lend support to the hypothesis that downward counterfactuals predict religious faith specifically by leading to perceptions of fatedness, which in turn predict perceptions of the hand of God and, in turn, religious faith.

In summary, Study 1 found consistent support for the hypothesis that counterfactual thinking plays an important role in belief in God. Thinking about downward counterfactuals led to an increased perception of fate that led to an increased perception of the hand of God, which led to an increase in religious faith. In other words, Study 1 suggested that counterfactual thinking leads believers to the belief that an event did not occur by chance alone, then individuals search for a likely source of this fate, which leads them to God, which then increases their religious faith. This occurred regardless of whether the event was positive or negative in valence.

The effects were limited to downward counterfactuals, or thinking about the ways that life might have been worse. This makes sense, given the positive view most of our participants have about God. Furthermore, the prominence of downward counterfactuals makes it unlikely that uncertainty reduction

played a role in the link between counterfactuals and faith. It is possible that participants in Study 1 felt less certain of the world due to the counterfactual thinking and the uncertainty (and not perceptions of the hand of God) led to the increased religiosity. However, if anything, one might expect upward counterfactuals to be more related to uncertainty than downward because they are more closely related to negative emotions and less closely related to positive emotions (e.g., Epstude & Roese, 2008; Inzlicht, McGregor, Hirsh, & Nash, 2009; Inzlicht & Tullet, 2010; McGregor, Nash, & Prentice, 2010; Roese, 1994; Sanna & Turley, 1996). Thus, the finding that upward counterfactuals were completely unrelated to increased religiosity makes it much less likely that uncertainty reduction played a causal role.

In Study 2, we hoped to replicate the results of Study 1 with a noncollege student sample. In addition, Study 2 utilized different measures of perception of God's influence on the event and fatedness to ensure that results were not limited to specific items. In addition, because the effects were only found for downward counterfactuals in Study 1 and did not differ based on the valence of the event, only downward counterfactuals and positive events were utilized to increase statistical power.

Study 2

Method

Participants

We recruited 108 (61 female; 1 questioning) diverse individuals ($M_{\text{age}} = 35.7$ years) via Amazon's Mechanical Turk (13 African/African American, 5 Asian/Asian American, 6 Hispanic/Hispanic American, 1 Arab/Arab American, 1 Native American, and 82 European/European American) and belief (2 Jewish, 20 Protestant, 15 Catholic, 1 Muslim, 0 Hindu, 13 Nondenominational, 14 Other Christian, 16 Agnostic, 14 Atheist, 5 Nonbeliever, 5 Spiritual/Nonreligious, and 3 Other). Users were restricted to be based in the United States, a hit approval rate of .99 as well as a minimum of 1,000 approved hits via Mturk's settings. The final sample included 99 participants, after 11 had to be excluded from the analyses, because they did not describe a (positive) life event ($n = 7$) or the life event they chose to write about was becoming religious itself ($n = 2$).

Materials and Procedures

Participants completed a writing prompt of either writing in downward counterfactuals or writing factually about a positive life event and then completed some potential mediator items followed by the religious faith-dependent measures.

Essay task. The essay task was identical to Study 1 but only included the positive event condition and the downward counterfactual and no counterfactual conditions.

Questionnaires. The religious faith questions from Study 1 were used, with the exception that the God Image scales were not added, as differing beliefs about God's character are of less importance to the question of divine influence. As in Study 1, the resulting scale had excellent internal consistency ($\alpha = .98$).⁴

Fate's role. "How much would you say was the event controlled by fate?" as well as "How much was fate responsible for the event's occurrence?" were each assessed on 7-point scales ($\alpha = .75$).

God's role. How much did you feel that God took an active role in how the life event unfolded?" "How much did you perceive God's guidance in the life event?" "I relied on God for guidance in this life event," "God worked through me or through others in making this positive life event happen for me," "God worked together with me to make this life event happen," "How much was the event you described controlled by God?" "How much was God responsible for the event's occurrence?" were each assessed on 7-point scales ($\alpha = .98$).

Further mediators. In addition to fatedness and God's role, we assessed further potential mediators including meaning, how unlikely participants found the event; how easy it would be to imagine alternate outcomes to the life event; whether the event was controlled or caused by the self, chance, or other people; and if other people or chance were responsible for the event's occurrence. None of these variables proved to be mediators of the observed effect linking downward counterfactuals to increased faith using a bootstrapping approach. We also assessed alternative outcome variables, such as optimism, death anxiety, life satisfaction, self-esteem, and flourishing, which were not predicted by counterfactual thinking in these data.

Results and Discussion

Counterfactuals and Religious Faith

Downward counterfactual reflection ($M = 4.04$, $SD = 2.12$) produced higher religious faith than factual reflection ($M = 3.11$, $SD = 2.24$; $p = .04$), mean difference = -0.93 , 95% CI = $[-1.81, -0.05]$.

Mediation by Fate's Role and God's Role

In order to test the hypothesis that downward counterfactuals increased religious faith by increasing fatedness perceptions, which in turn increased belief in God's role in the event, we conducted the same three steps as in Study 1. We tested (1) whether downward counterfactuals predicted each of the proposed mediators, fate's role, and God's role; (2) the indirect effect corresponding to each of the intermediate mediational paths; and (3) the overall indirect effect corresponding to the total-mediated effect.

Downward counterfactuals affecting fate's role and God's role. As predicted, downward counterfactuals predicted higher

perceptions of fate's role ($M = 4.62$, $SD = 1.82$) versus factual reflection ($M = 3.63$, $SD = 1.85$; $p = .01$; mean difference = -0.98 , 95% CI = $[-1.72, -0.24]$). In addition, downward counterfactuals predicted marginally higher perceptions of God's role in the event ($M = 3.74$, $SD = 2.23$) versus factual reflection ($M = 2.93$, $SD = 2.20$; $p = .08$; mean difference = -0.81 , 95% CI = $[-1.70, 0.09]$).

Fatedness mediating the effect of downward counterfactuals on hand of God. Perceptions of fate's role and God's role were indeed significantly correlated ($r = .45$, $p < .001$). Bootstrapped estimates of the indirect effect (using 5,000 bootstrap samples) indicated an indirect slope greater than 0 (indirect $B = 0.50$, 95% CI = $[0.09, 0.91]$, $z = 2.41$, $p = .02$). Downward counterfactuals may increase perceptions of God's role in an event specifically by leading to perceptions of fate's role in the event.

Hand of God mediating the association between fatedness and religious faith. Perceptions of fate's role and religious faith were indeed associated ($r = .34$, $p < .001$), and religious faith and perceptions of God's role were also significantly correlated ($r = .85$, $p < .001$). Bootstrapped estimates of the indirect effect between fate's role and religious faith by way of God's role (using 5,000 bootstrap samples) indicated an indirect slope greater than 0 (indirect $B = 0.46$, 95% CI = $[0.29, 0.64]$, $z = 5.17$, $p < .001$). These results suggest that perceptions of fate's role may predict religious faith specifically by leading to perceptions of God's role in an event.

Testing two-step mediation. Finally, we obtained the overall indirect effect corresponding to the total mediated effect (downward counterfactuals \rightarrow fate's role \rightarrow God's role \rightarrow religious faith), using Stata's `suredg` and `bootstrap` commands as in Study 1. Results indicated an indirect slope greater than 0 (indirect $B = 0.48$, 95% CI = $[0.08, 0.88]$, $z = 2.37$, $p = .02$). These results suggest that downward counterfactuals may predict religious faith specifically by leading to perceptions of fate's role in an event, which in turn predicts perceptions of God's role in the event and, in turn, religious faith.

In Summary, the results of Study 2 were highly consistent with those of Study 1 utilizing a nonstudent sample and different measures. Writing about downward counterfactuals from a positive life event led participants to feel as if fate played a role in the event, which led to a feeling that God played a role in the event that led to increased religiosity.

General Discussion

Across two studies, we found support for the hypothesis that counterfactual thinking leads to an increase in religious faith. Furthermore, we found that this effect is driven particularly by downward counterfactuals (Study 1). In addition, across both studies, generating downward counterfactuals about the life event led to a perception that the event was fated which led to a perception that God played a role in the event which led to increased religiosity.

The current research has important implications for views of religious cognition. The predominant view on cognitive styles and religiosity is that intuitive thinking is associated with religiosity (Shenhav, Rand, & Greene, 2012), whereas analytic reasoning is associated with nonreligiosity (Gervais & Norenzayan, 2012; Pennycook, Cheyne, Seli, Koehler, & Fugelsang, 2012). In other words, belief in God is intuitively appealing, but rationally unlikely, so individuals are most likely to believe in God when they rely on their intuitions at the expense of more rational cognition. However, such differences in intuitive versus deliberative processing cannot fully account for individual differences in belief in God because humans rarely hold beliefs for which they are unable to generate at least some deliberative evidence (Heider, 1958; Jones & Davis, 1965; Weiner, 1974, 1980). The current work suggests a mechanism by which individuals can generate, test, and find evidence for hypotheses about God—by seeing the way that God has made a difference in their lives.

It is possible that the current findings may be truer among some individuals than others and among some religions more than others. In the psychology of religion literature, the form in which believers perceive God to take control more generally has been found to vary on a continuum of all or specific life events being completely controlled by a deity or the deity taking control collaboratively together with the self (Berrenberg, 1987; Krause, 2005). Furthermore, while some believers view God as not interfering in life events at all, some believe that God is controlling all life events, and again others view God as a collaborative force (Soenens et al., 2012). In addition, believers sometimes perceive God as supportive, but other times as absent (e.g., Phillips, Pargament, Lynn, & Crossley, 2004). Finally, some major religions do not believe in a deity at all. Thus, it may be possible that the effects of downward counterfactuals on religious beliefs may be moderated by kind of religious orientation. Future work would be necessary to examine this interesting possibility.

In addition, different results may have been found if different kinds of counterfactual thoughts had been utilized. Participants in our studies were asked to think about major life events. Previous research suggests that thinking counterfactually about those kinds of events is particularly likely to lead to beliefs about fatedness (Burrus & Roese, 2005). Thus, if participants had generated counterfactuals about more mundane or recent events, it is less likely that they would perceive the role of fate and in turn feel more religious. Again, future research would be necessary to examine that possible moderator.

The current work suggests not only how religious faith can be built and bolstered; it may also shed light on how it may falter. Individuals who have experienced prolonged adversity that did not yield any apparent benefit or silver lining may have difficulty generating downward counterfactuals and thus be unable to find evidence for God's role in their lives. This inability to find evidence for God's presence, in particular when they felt that they need God the most, may lead to a decrease in faith. Thus, counterfactuals may play a role in the dissolution of

religious faith as well. Further research would be necessary to examine that hypothesis.

This work also increases understanding of the importance of counterfactual thinking, by demonstrating how important counterfactual thinking may be in daily life, providing a means by which people not only perceive the role of fate but find evidence for the existence of God in their lives. Thus, this work builds on an already strong literature that suggests the importance of counterfactual thinking.

In summary, our research suggests that people find evidence for divine intervention in their lives through counterfactual thinking, consistent with a view of all humans as naive scientists, testing their theories of the world against their everyday experience. It takes us one step closer to understanding religious cognition and the importance of counterfactual thinking in the human experience.

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Notes

1. In an initial study ($n = 118$), we found evidence for counterfactual thinking (regardless of direction) to increase religious faith. Since this study did not add anything substantially and due to length limitations for the article, we excluded it from this article. The study does however provide a conceptual, more general replication of the effects that are reported here.
2. Given that these studies are the first to demonstrate an association between counterfactuals and religious belief, the effect size for this association, if any, was previously unknown. In focal analyses across both studies, this effect size was estimated to be $\eta^2 = .02$ and $.04$, respectively. Post hoc analyses suggest that the power of these studies to detect these effect sizes was $.54$ and $.55$, respectively.
3. We also assessed several control measures including need for cognition (Cacioppo & Petty, 1982), self-esteem (Rosenberg, 1965), and need to belong (Leary, Kelly, Cottrell, & Schreindorfer, 2013). Also, in order to ensure that our effects would not be due to direct impacts of the life events on faith, we assessed whether participants felt that the event had directly affected their religious beliefs ("The life event made me more/less religious," "The life event made me less religious," and "My faith helped me deal with my life experience").

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Author Biographies

Anneke Buffone currently is the Lead Research Scientist and a post-doctoral fellow at the University of Pennsylvania's World Well-Being Project. Dr. Buffone's research specializes in other-focused motivations, emotions, and cognitions and its effects on social interactions. As a researcher, Dr. Buffone gains insights into these processes via various methods, such as psychophysiology, neuroendocrinology, and

theory and data-driven linguistic analysis in “big data”, such as social media.

Shira Gabriel is an Associate Professor of Psychology at SUNY, University at Buffalo, Social Psychologist (PhD, Northwestern University), and internationally renowned expert on Social Surrogacy—the tendency for humans to form psychological relationships with nonhuman (on nonavailable) entities. Professor Gabriel has published papers in prominent, peer-reviewed papers on the importance and nature of

psychological bonds with celebrities, favorite television shows, and comfort foods. In addition to expanding her research program on Social Surrogacy, Professor Gabriel also studies social comparison, friendship processes, and gratitude, and serves as the editor of the journal *Self & Identity*.

Michael Poulin is an Associate Professor of Social Psychology in the Department of Psychology at the University at Buffalo. His research focuses on stress, coping, altruism, prosocial behavior, and trauma.