# What Makes for Credible Religious Testimony? Exploring Belief and Skepticism About Others' Religious Experiences

Graziela Farias Martelli

A Thesis submitted to the Faculty of Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Master of Arts

Graduate Program in Social and Personality Psychology

York University

Toronto, Ontario

February 2025

## Abstract

This thesis examines the role of testimony in the formation and transmission of religious beliefs, focusing on the factors that influence its perceived credibility. Testimony is vital for sharing and reinforcing beliefs about experiences that cannot be directly tested, as is often the case with religious beliefs. These beliefs are frequently rooted in personal, unusual, or supernatural experiences, making testimony essential for their dissemination. Across four studies, I analyzed narrative features, storyteller characteristics, and listener predispositions to uncover what makes religious testimony compelling. Sensory reactions, perceived similarity to personal experiences, and the level of supernatural belief of perceivers emerged as key predictors of credibility. Honest storytellers and those with greater religious knowledge were viewed as more credible, particularly by highly religious listeners. These findings emphasize the role of core preexisting beliefs and source trustworthiness in shaping how religious testimony is evaluated and transmitted, extending psychological theories of belief formation.

## TABLE OF CONTENTS

## LIST OF TABLES

# LIST OF FIGURES

# What Makes for Credible Religious Testimony? Exploring Belief and Skepticism About Others' Religious Experiences

Religious people commonly report experiencing direct, personal interactions with supernatural entities, ranging from hearing the voice of God to sensing the presence of a deceased loved one or using divination to navigate life's challenges (Luhrmann, 2012, 2020). These encounters can be deeply significant not only for those who experience them but also for those who hear about them, potentially shaping communal beliefs and religious commitment (Taves, 2023; Taves & Barlev, 2023). Sharing such experiences as testimony—defined as narratives of personally lived events—has long served as a mechanism for disseminating and reinforcing beliefs (Harris & Corriveau, 2014, 2021). Testimony is essential in contexts where direct observation is impossible, providing evidence that can affirm or challenge the listener's worldview. For instance, parents often invoke testimony when teaching children about religious or scientific phenomena, tailoring their language to signal authority or plausibility of information (Heiphetz et al., 2021; McLoughlin et al., 2021; Shtulman, 2013). There is a wealth of developmental research which confirms the importance of testimony in shaping children's beliefs (Harris et al., 2018), but much less is known about why adults share testimony and how it is received by observers. In the context of religious testimony, we do not yet fully understand how it might influence others' beliefs or behaviors.

What makes religious testimony credible to its listeners? Why do some individuals accept these narratives while others remain skeptical? These questions are essential to understanding how religious beliefs are maintained or contested within societies. In this thesis, I investigated these mechanisms through a series of four studies, both exploratory and experimental. Drawing insights from social psychology, I examined factors influencing the credibility and

persuasiveness of religious testimonies, such as source credibility, emotional engagement, and the listener's predispositions. I grouped these factors into three main categories: Story Features, Storyteller Features, and Perceiver (Participant) Features.

**Story Features**

The characteristics of the story itself are likely central to determining its credibility. Stories that evoke strong emotional or physical reactions, such as feelings of awe, fear, or an inexplicable sense of presence, are often perceived as more credible (Green & Brock, 2000). Emotional engagement is known to enhance memory and believability in non-religious stories, suggesting that these factors might play a similar role for religious testimony, though this remains understudied in a religious context.

Additionally, stories that align with listeners' prior experiences or cultural narratives are more likely to be accepted. For instance, a story describing a miraculous healing might resonate more with individuals who have themselves experienced unexplained recoveries or have been culturally conditioned to view such events as plausible (Van Leeuwen & Van Elk, 2018). Discrepancies in the narrative, such as conflicting details or elements that contradict established beliefs, can undermine story credibility. However, identifying these discrepancies can be particularly challenging for religious testimony, as the events described are often untestable and based on faith rather than empirical evidence.

I also examined the role of time and timing in religious story credibility. Events that occurred recently may be perceived as more credible, potentially due to their immediacy and the accuracy of memory, whereas older accounts may evoke skepticism. Alternatively, religious testimony, on the other hand, might be reinforced over time due to its importance to the religious

community overall, leading to older stories feeling more believable to perceivers. Additionally, narratives that elicit strong emotional or sensory reactions—such as goosebumps or feelings of awe— could signal significance to listeners. Nevertheless, these reactions may interact with other factors, such as source credibility, to influence believability. Furthermore, individuals with similar personal experiences are more likely to accept a story as truthful, as shared experiences foster empathy and validation (Cohen, 2001). This logic aligns with findings from Taves and Barlev (2023), who argue that personal anomalous experiences create frameworks that make similar narratives about supernatural phenomena more plausible. Yet, differing interpretations of these events, especially in religious contexts, might instead foster skepticism among listeners with alternative worldviews.

**Storyteller Features**

The characteristics of the storyteller shape how testimony is received. Trustworthiness is a critical factor, with honest and sincere individuals being more likely to convey credible stories (Mercier, 2022). Religious knowledge and perceived spiritual authority also enhance credibility; storytellers who demonstrate deep understanding or hold prominent roles within a faith community are often viewed as reliable sources of information (Proctor, 2006). This aligns with research on how source expertise and prestige increase confidence in the truth of arguments, even for meaningful or everyday claims (Petty & Wegener, 1998).

Epistemic vigilance is also a key factor. Listeners are sensitive to whether a storyteller might have ulterior motives. If a storyteller stands to gain socially, materially, or otherwise, their testimony might be met with skepticism (Sperber et al., 2010). Conversely, storytellers perceived as honest and selfless—lacking any apparent agenda—are more likely to have their narratives

accepted. I explored these dynamics further, investigating how perceived honesty and religiosity interact to shape evaluations of religious testimony.

**Perceiver Features**

Listeners bring their own predispositions and beliefs to the evaluation of religious testimony. For instance, individuals who hold strong supernatural beliefs or identify as highly religious may be more inclined to accept religious testimony as credible. Similarly, those who have had their own anomalous or spiritual experiences often resonate with similar accounts shared by others (Taves & Asprem, 2017). This connection may reflect a broader cognitive bias: people are more likely to believe others' stories when they align with their own experiences and worldviews (Green & Brock, 2000).

I also investigate the role of porosity of mind beliefs—the idea that spiritual forces or thoughts can influence the physical world—in shaping the reception of religious testimonies. Listeners with high porosity of mind beliefs may be predisposed to accept narratives involving supernatural elements. It is unclear, however, whether such judgements are affected by other factors such as if both storyteller and perceiver share the same religious beliefs, above and beyond just sharing a similar experience.

Cognitive factors, such as epistemic vigilance, also affect how testimony is evaluated. Listeners naturally assess whether information could mislead or harm them, especially if it contradicts their existing beliefs or values. Even devout individuals critically evaluate religious testimony to distinguish between plausible accounts and those that seem fabricated or exaggerated (Luhrmann, 2012). Theories such as the Elaboration Likelihood Model suggest that individuals deeply interested in religious matters engage in central route processing, scrutinizing

the content more critically (Tormala et al., 2006). This processing can either enhance or diminish acceptance depending on the narrative's alignment with their beliefs (Tormala et al., 2006). This interplay between perceiver characteristics and narrative content underscores the complexity of belief formation in religious contexts.

**Overview of Current Studies**

In order to address these questions, this project aimed to investigate the variables that predict endorsement versus skepticism of other people's religious testimony, including features of the testimony itself and features of the perceiver. Some of these variables were drawn from theories about the cultural transmission of information and what makes testimony seem credible (Harris et al., 2018; Hong & Henrich, 2021; Morgan et al., 2012; Sperber et al., 2010). Examples of these variables include the trustworthiness of the source, social consensus about the accuracy of the testimony, and consistency with evidence and one's own prior experiences. Other variables related to credibility of the speaker were also assessed, such as beliefs about the existence of supernatural beings and the possibility of being able to experience their presences.

I conducted a series of four studies that systematically explored predictors of credibility in religious testimony. The first study was exploratory, examining how story, storyteller, and perceiver features predict the perceived credibility of religious stories. Participants were asked to share religious testimonies they considered to be true or not true, and to evaluate these stories based on specific characteristics. Building on these findings, the second study was preregistered and confirmatory, designed to replicate and extend the patterns observed in the first study with a different sample of participants. This study provided a robust test of credibility and skepticism as predictors.

The third study employed an experimental design to investigate how variations in storyteller features—perceived honesty and religious prestige—impact testimony credibility. By manipulating these features, this study established causal relationships between storyteller characteristics and perceived believability. Finally, the fourth study extended this investigation by examining the effects of storyteller honesty and shared religious affiliation. This study explored whether shared religious beliefs between the storyteller and the perceiver enhance credibility and whether general belief systems moderate these effects.

Through these studies, I aimed to identify the factors that predict belief in or skepticism toward religious testimony. By examining variables such as the storyteller's perceived trustworthiness, the emotional and sensory impact of the narrative, and the listener's pre-existing beliefs, the studies provide insight into how religious narratives are communicated and contested by religious and nonreligious persons alike. Together, these studies provide a comprehensive examination of several factors that predict belief in or skepticism toward religious testimony, offering insights into how such narratives are communicated and evaluated across diverse audiences. This research contributes to a broader understanding of trust, credibility, and the dynamics of belief within and beyond the psychology of religion.

## Study 1 – Exploring predictors of story credibility

I began by exploring various factors hypothesized to influence the perceived credibility of stories of religious experiences. Study 1 explored several aspects of religious stories and how they differ between believed versus disbelieved stories. It also investigated a number of features of the storyteller and participants predicted to be associated with certainty in shared stories.

## Participants

I recruited a sample of religiously and ethnically diverse undergraduates from York University ($N$ = 800). Participants received course credits for their time. After excluding participants based on failed attention check items(n) and removing incomplete surveys(n), I had 594 students who shared stories they believed to be true religious experiences ($n$ = 233) and stories they believed not to be true religious experiences ($n$ = 154), including 46 participants who shared both types of stories. Participants who did not share any stories ($n$ = 253) still completed the measures of beliefs and individual differences.

The final sample had a mean age of 20 years (17-53 range), with 430 identifying as women, 147 men, 9 non-binary, and 8 undisclosed genders. The sample was 26% South Asian, 22.6% White, 11.6% Middle Eastern, 10.6% Black, 8.8% Southeast Asian, 5.6% East Asian, 5.1% Hispanic or Latino, 0.5% Pacific Islander, 0.2% Aboriginal, and 9.1% multiple or other ethnicities. This was a very religiously diverse sample, with 32.4% Christians, 20.4% Muslims, 8.1% Hindu, 6% Sikh, 2.8% Jewish, 2% Buddhists, 0.3% Taoists, and 17.9% non-religious participants.

## Procedures

Participants were given the consent form and then asked to complete a willingness to write full sentences check. Participants were then asked to share a religious story they heard from another person (story generation task). They were asked to write stories they felt were either (a) probably true or (b) probably not true, in randomized order. After writing each story, they answered questions about the story they shared (story features), and about the person who originally told them the story (storyteller features), also in a randomized order. Finally, they

completed a set of measures about their personal beliefs and demographics, followed by a request for feedback about the survey.

### *Story Generation Task*

These religious experience stories were prompted by two framing conditions that requested participants to share what they believed to be (a) a true religious story, or (b) an untrue religious story. For example, participants were asked to report a true story through the prompt:

> Have you ever been told a story that you felt was **PROBABLY TRUE** from someone who claimed to have either seen, heard, or felt the presence of a religious supernatural being (e.g., heard God, felt God's presence in a specific moment, had an object behave in a specific way as a response to prayer, etc.)? This should be a story that you are quite sure was told honestly by a person who was accurately reporting their real religious experience.

Participants who were asked to report a story that was "probably not true" viewed a similar prompt but were asked to think of a story that "you believe to contain inaccuracies, or that the person who told it was being dishonest in their report."

If they answered yes to the prompt, participants were then asked to report the story with as many details as possible. We included guiding questions such as "Who told you this story?", and "Was there anyone else present at the time of the story?" to assist participant recall. Participants were presented with both conditions in a randomized order and were able to share both types of stories, only one type of story, or no story. Those who declined to share both story types were redirected to the personal beliefs section to complete the rest of the survey.

### *Story Features*

Participants were asked to report the extent to which they believed this testimony to be true/untrue with the following *credibility* item: "How certain are you that this story about a

religious experience is true? "(1 = not at all, 5 = extremely). To see if participants changed their perception of the story after having had time to process it, I measured *elapsed time* with the question "How long ago did you first hear this story?" (1 = in the last 3 months, 2 = 3 months to a year, 3 = longer than a year). Change in accuracy was measured by asking "How has your opinion of the accuracy of this story changed over time?" (1 = less accurate, 2 = no change, 3 = more accurate).

I was also interested if participants had a physical or emotional reaction upon hearing the story, since having anomalous sensory experiences might lead them to question their lack of belief. Physical reaction was measured with "Did you experience a physical reaction (such as chills, goosebumps, or heart racing) at any time while hearing or retelling this story?" (yes/no followed by text box). Emotional reaction to the story, "Did you experience an emotional reaction (such as a knot in the throat, feeling like crying, feeling like someone invisible is watching or present, fear, anxiety) at any time while hearing/retelling this story?" (yes/no followed by text box). Lastly, their own experiences with unexplained phenomena might influence their judgement. To check for similarity to participant's own prior credible experiences, they were asked "Was the story similar to anything you have experienced before yourself?" (yes/no followed by text box).

***Storyteller Features***

Participants were first asked to report on the source of the story by identifying their relationship to the *Storyteller*: "Who was this person to you? (e.g., uncle, cousin, coworker, supervisor, church pastor, etc.)" (open-ended text box). How much the storyteller might be worthy of trust due to their religiosity was measured with two items. The first focused on how

religious they were perceived to be: “How religious was this person?” (1 = not religious at all, 5 = extremely religious). The second item focused on how much knowledge specific to their religion they might have, which might indicate a certain level of religious prestige: “How much religious knowledge did this person have?” (1 = not knowledgeable at all, 5 = extremely knowledgeable).

I also wanted to test if story certainty scores would be influenced by the storyteller’s perceived authority: “Did this person have authority over you?” (1 = none at all, 5 = a great deal). To check for possible epistemic vigilance to potential reasons for someone to communicate misleading information, such as if this information would benefit the sender at a cost to the observer, we used an item addressing *personal gain*: Did this person have something to gain by making you believe in this story? (1 = nothing at all, 5 = a great deal). The overall trustworthiness of the storyteller was measured with a single item: “Was this person typically someone you could trust to be honest?” (1 = not at all, 5 = a great deal).

Participants were also asked to provide an open-ended description of any other reasons they found the testimony they shared to be compelling or suspicious, which we later coded for additional justifications.

***Participant Features***

Several scales measured relevant constructs about the participants. Participants completed an 8-items *Religiosity Scale* ($\alpha = .90$) about their level of religious commitments, including self-identification as a religious/spiritual person, frequency of religious practices, and the importance of religion in one’s life. Participants also reported their beliefs about a porous theory of mind, where one’s thoughts and feelings can directly affect others and the environment. The 12-items

Porosity Scale (adapted from Luhrmann et al., 2021; α = .91) included items such as "Evil thoughts can go out into the world like wi-fi or a radio—like radio waves going directly into the world—and cause bad things to happen to other people, without a spirit's help". They answered questions about their personal experiences with various supernatural entities and events, such as "Have you ever felt a demonic presence as if it was there in the room with you?", in a 14-items Spiritual Experiences Scale (adapted from Luhrmann et al., 2020; α = .90). Lastly, participants reported their level of general belief in various supernatural agents/forces, such as "There is a spiritual realm besides the physical one," on a 10-items Supernatural Belief Scale (adapted from Jong et al., 2013; α = 94).

The survey concluded with basic demographic measures, such as age, gender, educational background, subjective SES, and request for feedback on the study.

## Results

### *Analysis strategy*

The analysis began with descriptive statistics for demographic variables and correlations between the variables measured for each story type. Variables were grouped by (a) Story features, (b) Storyteller features, and (c) Participant features, with correlations calculated within each group. To compare the means of each variable for true versus untrue stories, I conducted a partially overlapping samples t-test (using the R package {Partiallyoverlapping}; Derrick et al., 2015) to account for the partial nesting of participants who shared both types of stories. The results are reported in the story and storyteller features sections. The analysis in the participant features section was done using grand mean centered variables and did not include t-tests for these.

To investigate how specific features were associated with ratings of certainty about a story, I ran multiple linear regression models predicting certainty from the features in each group. I included cluster-robust standard errors for each group to account for shared variance due to the nesting of responses within participants who shared both types of stories, using participants as the cluster groups. The goal of these models was to test the association between each variable group and Certainty. Certainty and participant features were grand mean centered, while story and storyteller variables were centered on the group means. This was done to facilitate interpretation of the results, as it does not affect the statistical calculations.

Lastly, I gathered the predictors with the highest impact on certainty for each group to test for their joint influence on Certainty. After comparing several models against each other to find the one that fit the data best, I found that the simpler model with no interactions was the most appropriate. Results of this analysis are reported in the Main Predictors section.

***Story Features***

For differences between the story types (Table 1), participants were more certain about the true stories than they were about the untrue stories, and were more likely to report having had a physical or emotional reaction upon hearing a true story compared to an untrue story. They were also more likely to report having had a similar experience to a true story than an untrue one. The correlations between story features and certainty revealed that stories heard more recently were rated as more certain to be true. Participants in the true story condition who had a physical or emotional reaction also were more certain of the truth of stories they shared. And finally, participants in the true story condition who reported having had a similar personal experience were more certain about their story.

Table 1

*Story Features Descriptive Statistics by Story Type, Correlation With Story Certainty, and T-Test of Difference Between Story Types*

| Variable | True Story | | | Untrue Story | | | *t* |
|---|---|---|---|---|---|---|---|
| | *M* | *SD* | Certainty Correlation | *M* | *SD* | Certainty [b] Correlation | |
| Certainty | 3.77 | 1.07 | | 2.65 | 1.29 | | 9.07*** |
| Time | 2.54 | 0.75 | -.21*** [-.33, -.08] | 2.68 | 0.63 | -.06 [-.21, .10] | -2.10* |
| Physical Reaction [a] | 0.51 | 0.50 | .24*** [.12, .36] | 0.14 | 0.35 | .01 [-.15 .17] | 7.36*** |
| Emotional Reaction [a] | 0.37 | 0.48 | .13* [.00, .26] | 0.13 | 0.34 | .02 [-.14, .17] | 5.41*** |
| Similar Experience [a] | 0.25 | 0.43 | .21*** [.08, .33] | 0.06 | 0.24 | .07 [-.09, -.22] | 5.96*** |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

[a] dichotomous variable, tested using partially overlapping samples z-tests.

[b] Untrue story certainty measured as certainty story is not true.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

The results of the linear regression predicting certainty from all story feature variables (Table 2) indicated that the main contributors to story certainty were whether participants had a physical reaction and if they had experienced a similar occurrence. Participants were more certain of stories that were more recent than they were of stories they heard longer than a year prior.

Table 2

*Regression Results Using Certainty as the Criterion, with Clustered Standard Error*

| Predictor | *b* | *SE* | 95% CI [LL, UL] |
|---|---|---|---|
| Intercept | - 0.393*** | 0.088 | [-0.55, -0.23] |
| Time | - 0.201* | 0.089 | [-0.37, -0.03] |
| Physical Reaction [a] | 0.579*** | 0.125 | [0.31, 0.85] |
| Emotional Reaction [a] | 0.239 | 0.136 | [-0.05, 0.53] |
| Similar Experience [a] | 0.647*** | 0.143 | [0.33, 0.97] |
| $R^2$ = .140***, 95% CI [.08, .20] | | | |

*Note.* * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.
[a] dichotomous variable

***Storyteller Features***

For differences in the features of the storyteller between story types (Table 3), storytellers had less authority and were perceived to have more to gain for the untrue stories, whereas storytellers were thought to have more religious knowledge and be more honest in the true stories. Certainty about the story was greater for storytellers reported to be more religious, have more religious knowledge, be more honest, and to have little to gain from the participant believing the story, although most of these correlations were weak.

Table 3

*Storyteller Features Descriptive Statistics by Story Type, Correlation With Story Certainty, and T-Test of Difference Between Story Types*

| Variable | True Story | | | Untrue Story | | | *t* |
|---|---|---|---|---|---|---|---|
| | *M* | *SD* | Certainty Correlation | *M* | *SD* | Certainty [a] Correlation | |
| Religiosity | 3.58 | 1.08 | .17* [.04, .29] | 3.61 | 1.17 | -.03 [-.19, .12] | -0.24 |
| Religious Knowledge | 3.62 | 0.89 | .16* [.03, .28] | 3.31 | 1.01 | .09 [-.07, .24] | 3.16** |
| Authority | 2.51 | 1.55 | .07 [-.06, .20] | 2.01 | 1.33 | .04 [-.12, .20] | 3.49*** |
| Perceived to Gain | 1.58 | 1.07 | -.15* [-.27, -.02] | 1.96 | 1.15 | -.24** [-.38, -.08] | -3.35*** |
| Honesty | 4.17 | 0.94 | .37** [.25, .47] | 3.01 | 1.34 | .25** [.10, .39] | 9.50*** |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

[a] Untrue story certainty measured as certainty story is not true.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

The results of the linear regression predicting story certainty from all storyteller features together (Table 4) indicated that the main contributors to certainty in the storyteller group were whether the original storyteller was seen as honest and if they were thought to have something to gain from the participant believing their story. Participants were more certain about stories told by more honest storytellers and were less certain about stories from storytellers who were perceived to have something to gain from participants believing their story.

Table 4

*Regression Results Using Certainty as the Criterion, with Clustered Standard Error*

| Predictor | *b* | *SE* | 95% CI [LL, UL] |
|---|---|---|---|
| Intercept | -0.00 | 0.063 | [-0.12, 0.12] |
| Religiosity | 0.021 | 0.082 | [-0.13, 0.18] |
| Religious Knowledge | 0.051 | 0.103 | [-0.14, 0.24] |
| Authority | -0.014 | 0.046 | [-0.11, 0.08] |
| Perceived to Gain | -0.145* | 0.065 | [-0.26, -0.03] |
| Honesty | 0.278*** | 0.070 | [0.15, 0.40] |
| $R^2$ = .093***, 95% CI [.04,.14] | | | |

*Note.* * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

***Participant Features***

Scores for participants features were grand mean centered and correlated with the likelihood of having shared each type of story and with story certainty by type (Table 5). Participants who were high in supernatural beliefs, religiosity, porosity, or spiritual experiences were more likely to share a true story and less likely to share an untrue story. Participant features are strongly correlated with the certainty of true stories, but only weakly or not significantly correlated with certainty of untrue stories. Supernatural belief correlation with certainty in true story types was positive and strong, whereas the correlation with certainty in untrue story was weaker but still statistically significant.

Table 5

*Participant Features Descriptive Statistics by Story Type and Correlation with Likelihood of Sharing a Story and Story Certainty*

| Variable | *M* | *SD* | True Story | | Untrue Story | |
|---|---|---|---|---|---|---|
| | | | Shared Story Correlation | Certainty Correlation | Shared Story Correlation | Certainty [a] Correlation |
| Supernatural Belief | 4.83 | 1.55 | .25*** [.17, .32] | .44*** [.33, .53] | -.15*** [-.23, -.08] | .24** [.08, .38] |
| Religiosity | 2.62 | 1.00 | .24*** [.16, .31] | .46*** [.35, .56] | -.13** [-.21, -.05] | .12 [-.04, .27] |
| Porosity | 3.45 | 1.35 | .27*** [.20, .34] | .28*** [.16, .40] | -.18*** [-.26, -.10] | .10 [-.06, .26] |
| Spiritual Experiences | 1.73 | 0.69 | .30*** [.23, .37] | .27*** [.14, .38] | -.10* [-.18, -.02] | .15 [-.01, .30] |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

[a] Untrue story certainty measured as certainty story is not true.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

The results of the linear regression predicting story certainty from all participant features (Table 6) indicated that the main contributors to story certainty were the participant's level of supernatural belief and religiosity. Participants who had stronger supernatural beliefs were more certain about the stories they shared. Likewise, more religious participants were more certain about their stories.

Table 6

*Regression Results Using Certainty as the Criterion, with Clustered Standard Error*

| Predictor | *b* | *SE* | 95% CI [LL, UL] |
|---|---|---|---|
| Intercept | -0.065 | 0.061 | [-0.18, 0.05] |
| Supernatural Belief | 0.202** | 0.064 | [0.08, 0.32] |
| Religiosity | 0.192* | 0.087 | [0.02, 0.36] |
| Porosity | 0.037 | 0.059 | [-0.08, 0.15] |
| Spiritual Experience | 0.159 | 0.087 | [-0.03, 0.35] |
| $R^2$ = .194***, 95% CI [.12, .26] | | | |

*Note.* Values in square brackets indicate the 95% confidence interval for the estimate.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

***Main Predictors***

The linear model predicting story certainty from the main predictors of each group together (Table 7) indicated that these variables contributed to story certainty even when tested in the same model. The predictors for the story group were how recently participants had heard the story for the first time, whether participants had a physical reaction to hearing the story originally, and if they had experienced a similar occurrence themselves. For the storyteller group, the honesty of the storyteller and if they were perceived to gain anything were the main predictors. Participants' own supernatural beliefs and level of religiosity also continued to predict certainty in stories at this level. The two predictors with the most influence on certainty overall were physical reaction and storyteller honesty.

Table 7

*Regression Results Using Certainty as the Criterion and the Main Predictors From Each Group*

| Predictor | *b* | *SE* | 95% CI [LL, UL] |
|---|---|---|---|
| Intercept | -0.29*** | 0.077 | [-0.43, -0.15] |
| Time | -0.16* | 0.083 | [-0.32, -0.01] |
| Physical Reaction [a] | 0.50*** | 0.113 | [0.27, 0.74] |
| Similar Experience [a] | 0.36** | 0.134 | [0.06, 0.66] |
| Perceived to Gain | -0.13* | 0.053 | [-0.23, -0.02] |
| Honesty | 0.20*** | 0.059 | [0.09, 0.30] |
| Supernatural Belief | 0.18** | 0.054 | [0.08, 0.28] |
| Religiosity | 0.17* | 0.081 | [0.02, 0.33] |
| $R^2$ = .295***, 95% CI [.21, .35] | | | |

*Note.* Values in square brackets indicate the 95% confidence interval for the estimate.

[a] dichotomous variable

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

## Study 2 – Confirming Predictors of Story Credibility

Study 2 was a preregistered replication of key findings from Study 1. This study switches from a Canadian student sample to an American adult (non-student) sample, to test for generalizability across these populations. Two new scales measuring storyteller honesty and prestige were added, as well as a new measure of whether the participant and storyteller shared the same religious background. The item measuring story certainty was also changed into story credibility and improved to provide a better measurement of the participant's perception of story

likelihood and accuracy. The preregistration can be found here: https://osf.io/k95yp/?view_only=c52f419d9adf4505b97014893930a242 .

**Participants**

In this study a sample of non-student adults from the United States were recruited through the crowd-sourcing service Prolific.com. Participants received a small monetary payment in exchange for participation. After excluding participants based on attention check items and removing incomplete surveys, the sample consisted of 730 participants who shared 310 stories they believed to be true religious experiences, and 326 stories they believed not to be true, including 105 participants who shared both types of stories. Participants who did not share any stories ($n$ = 199) still completed the measures of supernatural beliefs and individual differences.

The final sample had a mean age between 35-44 years, with 364 identifying as men, 344 women, 15 non-binary, and 7 undisclosed genders. These participants had less ethnic and religious diversity than our student sample but was consistent with typical American online samples. The participants were 62.9% White, 14.1% Black, 8.6% Hispanic or Latino, 5.6% East Asian, 2.6% Southeast Asian, 1.6% South Asian, 0.4% Middle Eastern, 0.4% Pacific Islander, 0.3% Aboriginal, and 3.4% multiple or other ethnicities. The sample was almost equally split between Christians and non-religious participants, with 47.4% Christians, in contrast with 42.2% non-religious participants. Other religions were represented in small numbers, with 2.3% Jewish, 1.6% Muslims, 1.6% Buddhists, 0.6% Hindu, and 0.3% Taoists.

**Procedures**

Participants completed a procedure similar to Study 1, reporting up to two stories (one true, one untrue) about someone else's religious experiences, and then rating various features of the story, the storyteller, and their own personal beliefs along with demographics. Based on the results of Study 1, three additions were made. I included 3 new measures that looked at storyteller honesty, prestige, and if the storyteller and the participant share the same religious affiliation or not, the number of scales for measuring participant features was reduced, and the item measuring story certainty was modified to be directly comparable across both true and untrue stories.

I previously measured storyteller honesty with a single item, so I added a more robust measure while retaining the single item to allow me to compare between studies. In this study, storyteller honesty was measured using the peer-report format of the Sincerity and Fairness subscales of the HEXACO-PI-R Inventory (Lee & Ashton, 2018, $\alpha = .88$). Participants rated 16 statements about the storytellers on a scale ranging from 1 (Strongly disagree) to 5 (Strongly agree), with 10 reverse coded items. The statements included items such as "If he/she wanted something from someone, he/she would ask for it directly, instead of manipulating them into giving it". Higher mean scores indicated greater perceived storyteller honesty. Storyteller Prestige was measured using an adapted version of the peer report Prestige Scale from Cheng and colleagues (2010, $\alpha = .87$). Participants rated 9 statements about how much they described the storytellers on a scale ranging from 1 (Not at all) to 5 (Very much), with 3 reverse-coded items. The statements included items such as "Members of your community respect and admire him/her". Higher mean scores indicated greater perceived storyteller prestige.

Also included was a measure of religious matching asking participants if they had the same religious affiliation as the storyteller, with a 4-option item: “we follow the same religion”, “we follow different religions”, “we are both non-religious”, and “one of us is religious and the other is not”. I predicted that participants who shared religious affiliation with the storyteller would rate true stories as more credible than if they did not belong to the same religion, whereas untrue stories would be rated as less credible if they did not share the same religion. I also preregistered creating a composite score by combining storyteller religiosity and religious knowledge.

Due to the increase in the number of measures in this study, the Porosity Scale was removed to reduce participant fatigue. This was done in favour of keeping both the religiosity and supernatural belief scales as they were more relevant to the focal research question.

After further consideration of the original measures used, I concluded that the item measuring story certainty could be improved to make it more applicable and directly comparable between true and untrue story types. The previous item asked participants about their certainty that the story they shared was either true (in the true story condition) or untrue (in the untrue story condition). This meant that participants were answering slightly different questions depending on the story type condition they were in. As such, interpretation of the comparison between story certainty in each condition was limited by that fact. Therefore, to better compare the two conditions, story certainty was measured differently in Study 2. Participants answered how certain they were that the story was true, with range from 1= *definitely not* true, 4 = *I don’t know*, to 7 = *definitely true*, and I used the same item for both story types. Due to this change, I will refer to this measure as Story Credibility in this and the coming studies This change also

makes interpretation of results more straightforward when analyzing credibility in both true and untrue stories together.

## Results

### *Analysis Strategy*

Analyses followed the same strategy as Study 1, first examining how variables differ between true and untrue stories using a partially overlapping samples *t*-tests for each feature group, and examining correlations between each variable and subjective story credibility.

I also preregistered two new analysis methods for this study. The first included several individual linear regressions predicting each story/storyteller feature from the type of story, supernatural beliefs, and any interaction between the two. Further details and the results of this analysis are included in the *Story Type and Supernatural Belief Predictors* section. The second analysis was a linear regression predicting story credibility simultaneously from a group of key features and interactions with participant supernatural belief. The results of this analysis are included in the *Predictors of Credibility* section below.

### *Story Features*

For differences between the story types (Table 8), participants rated the true stories as more credible than the untrue stories and were more likely to report having had a physical or emotional reaction upon hearing a true story compared to an untrue story. They were also more likely to report having had a similar experience to a true story than an untrue one. Examining correlations between story features and subjective ratings of story credibility revealed that a physical or emotional reaction to the story predicted credibility more strongly for the true stories

than untrue stories. Having had a similar personal experience also predicted greater credibility for a true story. Finally, stories participants heard more recently were rated as less credible.

Table 8

*Story Features Descriptive Statistics by Story Type, Correlation With Story Credibility, and T-Test of Difference Between Story Types*

| | True Story | | | Untrue Story | | | |
|---|---|---|---|---|---|---|---|
| Variable | *M* | *SD* | Credibility Correlation | *M* | *SD* | Credibility Correlation | *t* |
| Credibility | 6.03 | 1.25 | | 2.46 | 1.76 | | 30.79*** |
| Time | 2.55 | 0.74 | -.07 [-.18, .04] | 2.57 | 0.69 | -.12* [-.23, -.01] | -0.48 |
| Physical Reaction [a] | 0.45 | 0.50 | .19*** [.08, .30] | 0.11 | 0.31 | .14* [.03, .25] | 9.67*** |
| Emotional Reaction [a] | 0.39 | 0.49 | .20*** [.09, .30] | 0.14 | 0.35 | .11 [-.00, .21] | 7.32*** |
| Similar Experience [a] | 0.26 | 0.44 | .21*** [.10, .32] | 0.07 | 0.26 | .07 [-.04, .18] | 6.72*** |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

[a] dichotomous variable, tested using partially overlapping samples z-tests.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

***Storyteller Features***

True story storytellers were rated lower in how much they were perceived to gain, and higher in honesty, religious knowledge, and authority (Table 9). Correlations with credibility were stronger for storytellers who were more honest, had more religious knowledge, and had less to gain in true stories. For untrue stories, greater honesty and religious knowledge was also correlated with greater credibility.

Table 9

*Storyteller Features Descriptive Statistics by Story Type, Correlation With Story Credibility, and T-Test of Difference Between Story Types*

| | True Story | | | Untrue Story | | | |
|---|---|---|---|---|---|---|---|
| Variable | *M* | *SD* | Credibility Correlation | *M* | *SD* | Credibility Correlation | *t* |
| Religiosity | 3.60 | 1.18 | .11 [-.01, .21] | 3.76 | 1.19 | -.08 [-.19, .02] | -1.72 |
| Honesty [a] | 4.32 | 0.92 | .23*** [.12, .34] | 2.94 | 1.27 | .32*** [.22, .41] | 15.56*** |
| Religious Knowledge | 3.59 | 1.03 | .21*** [.11, .32] | 3.24 | 1.09 | .11* [.01, .22] | 4.16*** |
| Authority | 2.00 | 1.41 | -.04 [-.15, .07] | 1.60 | 1.06 | .09 [-.02, .20] | 4.42*** |
| Perceived to Gain | 1.36 | 0.90 | -.16** [-.26, -.05] | 1.90 | 1.24 | .003 [-.11, .11] | -6.73*** |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.
[a] dichotomous variable, tested using partially overlapping samples z-tests.
* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

I predicted that true stories would be reported as coming from more prestigious storytellers, honest storytellers, and storytellers who match participants' religious affiliation. The measures used for Honesty and Prestige followed the same trend as the single item measure and confirmed these hypotheses (Table 10). For true stories, storytellers were more honest, had more prestige, and were more likely to be of the same religion as the participants than untrue stories. Story credibility was correlated with storyteller prestige and honesty for both story types. Participants also rated stories as more credible when the storyteller's religion matched their own.

Table 10

*Correlations With Story Credibility by Story Type and Mean Differences Between Conditions*

| | True Story | | | Untrue Story | | | |
|---|---|---|---|---|---|---|---|
| Variable | *M* | *SD* | Credibility Correlation | *M* | *SD* | Credibility Correlation | *t* |
| Storyteller Religiosity | 3.59 | 1.01 | .17** [.06, .28] | 3.50 | 1.03 | .01 [-.10, .12] | -1.72 |
| Honesty | 4.00 | 0.70 | .30*** [.19, .39] | 3.26 | 0.94 | .15** [.04, .25] | 11.26*** |
| Prestige | 2.88 | 0.62 | .15** [.04, .26] | 2.67 | 0.57 | .21*** [.10, .31] | 4.76*** |
| Religious Match [a] | 0.67 | 0.47 | .21*** [.10, .32] | 0.38 | 0.49 | .16** [.05, .26] | 7.94*** |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

[a] dichotomous variable, tested using partially overlapping samples z-tests.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

***Participant Features***

For participant features, I first tested whether participants with greater Supernatural Belief would be more likely to have a true story, and those with less Supernatural Belief would be more likely to have untrue or no stories. I also hypothesised that participants with high Religiosity would be more likely to have a true story and those with low Religiosity would be more likely to have untrue or no stories. These hypotheses were all confirmed (Table 11). Story credibility was also strongly correlated with supernatural belief, religiosity, and spiritual experiences for both story types. Participants high in supernatural belief, religiosity, and spiritual experiences rated stories as more credible than participants low in those traits, for both true and untrue story types.

Table 11

*Participant Features Descriptive Statistics by Story Type and Correlation With Story Shared and Story Credibility*

| | | | True Story | | Untrue Story | |
|---|---|---|---|---|---|---|
| Variable | *M* | *SD* | Shared Story Correlation | Credibility Correlation | Shared Story Correlation | Credibility Correlation |
| Supernatural Belief | 4.10 | 1.95 | .41*** [.35, .47] | .41*** [.32, .50] | -.16*** [-.23, -.09] | .34*** [.24, .43] |
| Religiosity | 2.32 | 1.21 | .36*** [.29, .42] | .39*** [.29, .48] | -.11** [-.18, -.04] | .34*** [.24, .43] |
| Spiritual Experiences | 1.89 | 1.24 | .28*** [.21, .34] | .22*** [.11, .32] | -.06 [-.13, .01] | .37*** [.27, .46] |

*Note.* Values in square brackets indicate the 95% confidence interval for each correlation.

* indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$.

### *Story Type and Supernatural Belief Predictors*

I conducted further regression models to test whether participants' own level of supernatural beliefs moderated the differences in story/storyteller features between true and untrue stories. In this new analysis, I ran several linear models using the predictors story type (true vs. untrue), participants' supernatural beliefs, the interaction between story type and supernatural beliefs, with random intercepts for each participant, regressed on each outcome variable separately.

Consistent with the analyses described above, the type of story shared predicted greater storyteller religiosity and physical reactions from the participant (Table 12). True stories had less-religious storytellers and higher odds of having a physical reaction, and untrue stories had more-religious storytellers and lower odds of having a physical reaction. Supernatural belief predicted higher ratings of storyteller prestige, match in religion, and odds of similarity to one's own experiences. Finally, there were interactions between story shared and supernatural beliefs when predicting storyteller religiosity, honesty, and similarity to participants' experiences. For true stories, participants low in supernatural belief predicted lower storyteller religiosity, and those high in supernatural belief also rated the storyteller as higher in religiosity (Figure 1). However, for untrue stories supernatural belief did not predict storyteller religiosity. Likewise, when describing true stories participants higher in supernatural belief also rated the storyteller as higher in honesty. However, untrue stories showed the opposite pattern for storyteller honesty, with supernatural belief predicting lower ratings of storyteller religiosity.

Table 12

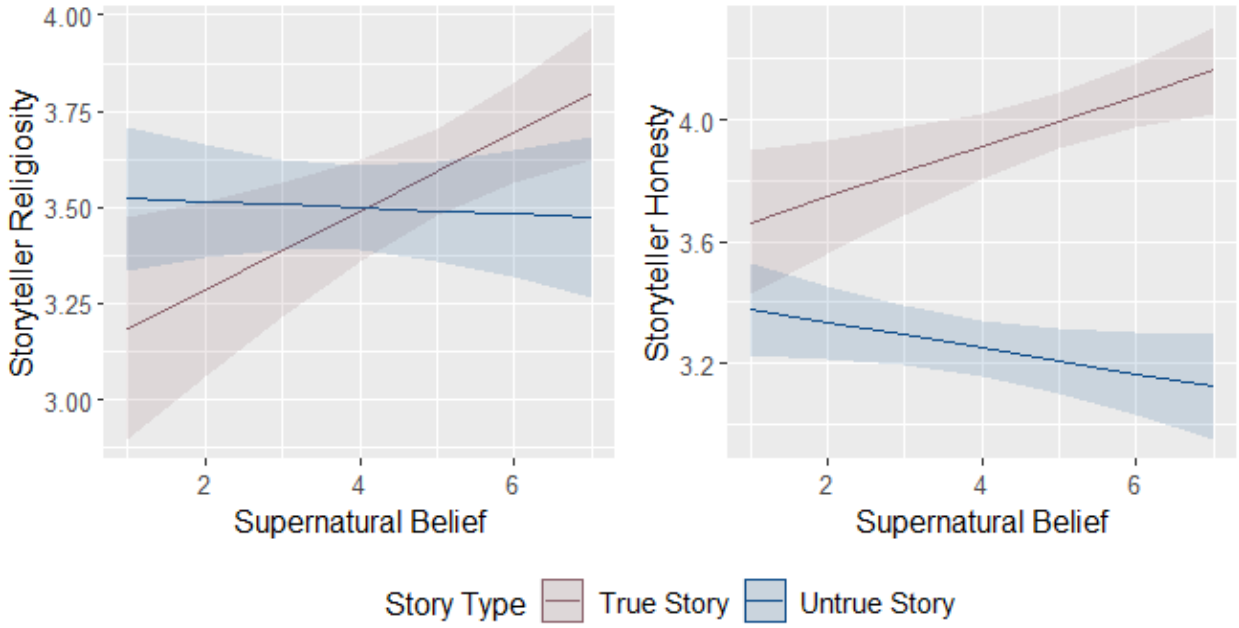
*Regressions of Story Type and Supernatural Belief With Interactions Predicting Story Features*

| | **Physical Reaction** | **Emotional Reaction** | **Similarity** |
|---|---|---|---|
| *Predictors* | *Odds Ratios* | *Odds Ratios* | *Odds Ratios* |
| Intercept | 0.07***<br>[0.03 – 0.16] | 0.06***<br>[0.02 – 0.16] | 0.00***<br>[0.00 – 0.00] |
| True Story | 3.14*<br>[1.04 – 9.78] | 3.12<br>[0.91 – 10.71] | 0.16<br>[0.00 – 12.04] |
| Supernatural Belief | 1.14<br>[0.96 – 1.37] | 1.18<br>[0.98 – 1.42] | 0.38**<br>[0.20 – 0.74] |
| True Story × Supernatural Belief | 1.12<br>[0.89 – 1.40] | 1.06<br>[0.82 – 1.36] | 4.03***<br>[1.85 – 8.80] |
| **Random Effects** | | | |
| $\sigma^2$ | | 3.29 | 3.29 |
| $\tau_{00\ ParticipantId}$ | | 1.28 | 343.76 |
| Marginal $R^2$ / Conditional $R^2$ | 0.167 ($R^2$ Tjur) | 0.150 / 0.388 | 0.017 / 0.991 |

| | **Religiosity** | **Honesty** | **Prestige** | **Religious Match** |
|---|---|---|---|---|
| *Predictors* | *b* | *b* | *b* | *Odds Ratios* |
| Intercept | 3.53***<br>[3.30 – 3.76] | 3.42***<br>[3.23 – 3.61] | 2.51***<br>[2.37 – 2.64] | 0.00***<br>[0.00 – 0.00] |
| True Story | -0.45*<br>[-0.86 – -0.03] | 0.16<br>[-0.18 – 0.50] | -0.03<br>[-0.25 – 0.19] | 5.86<br>[0.00 – 12.84] |
| Supernatural Belief | -0.01<br>[-0.06 – 0.05] | -0.04<br>[-0.09 – 0.00] | 0.04*<br>[0.01 – 0.07] | 31.02***<br>[9.79 – 98.26] |
| True Story × Supernatural Belief | 0.11*<br>[0.02 – 0.19] | 0.13***<br>[0.06 – 0.19] | 0.04<br>[-0.00 – -0.09] | 1.33<br>[0.59 – 3.02] |
| **Random Effects** | | | | |
| $\sigma^2$ | 0.97 | 0.68 | 0.18 | 3.29 |
| $\tau_{00\ ParticipantId}$ | 0.06 | 0.01 | 0.16 | 114.78 |
| Marginal $R^2$ / Conditional $R^2$ | 0.017 / 0.072 | 0.179 / 0.192 | 0.069 / 0.498 | 0.333 / 0.981 |

Figure 1

*Interactions Between Story Type and Supernatural Belief Predicting Storyteller Religiosity and Honesty*




***Predictors of Credibility***

The final preregistered analysis included a large model including several variables and interactions with random intercepts by participant, predicting story credibility (Table 13). The hypotheses being tested by this model were that story credibility would be predicted by participant supernatural belief and religiosity, storyteller prestige and honesty, and participant and storyteller having the same religious affiliation. We also predicted and interaction between participant supernatural belief and storyteller religiosity such that participants high in religiosity would rate stories from highly religious storytellers as more credible, and participants low in religiosity would rate stories from highly religious storytellers as less credible.

As predicted, storyteller ratings of prestige and honesty, and participant physical reaction and similar experiences, were statistically significant predictors of story credibility ratings. There was also an interaction between participant's supernatural beliefs and storyteller honesty predicting credibility (Figure 2), such that storyteller honesty was most strongly associated with credibility among participants high in supernatural belief. There were no significant interactions between supernatural belief and the other variables.

Figure 2

*Interaction Between Supernatural Belief and Storyteller Honesty Predicting Story Credibility*

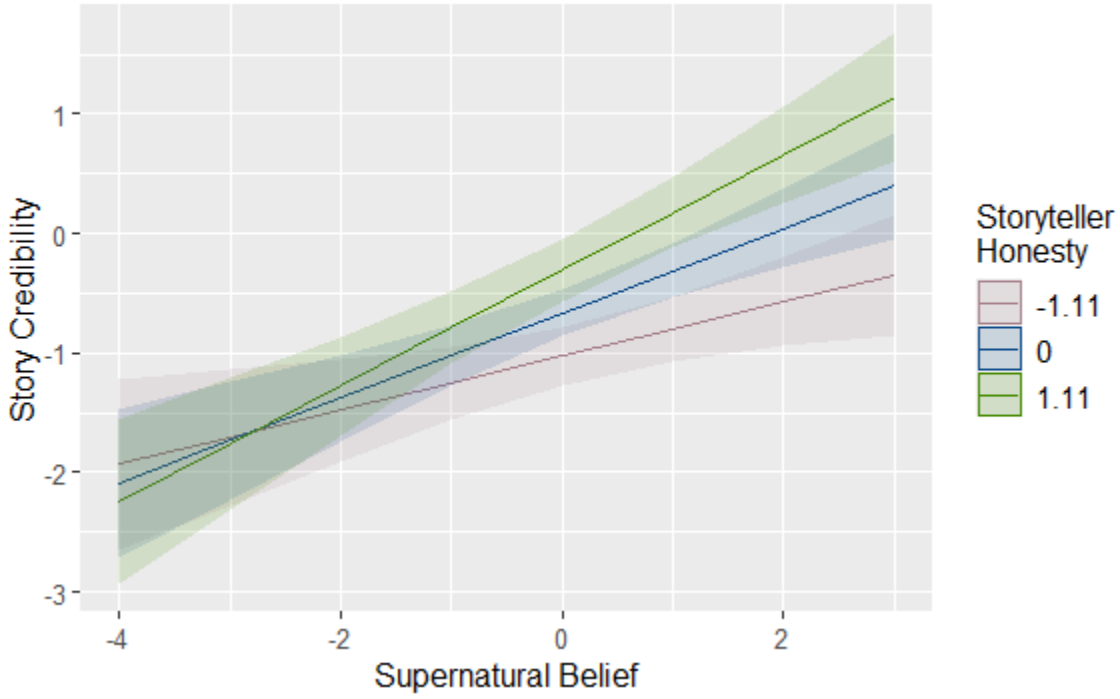


Table 13

*Mixed Effects Regression With Credibility as Criterion*

| | Story Credibility | | |
|---|---|---|---|
| *Predictors* | *b* | *CI* | *p* |
| Intercept | 0.19 | -0.74 – 1.11 | 0.690 |
| Supernatural Belief | -0.31 | -0.76 – 0.14 | 0.176 |
| Religiosity | 0.09 | -0.11 – 0.30 | 0.367 |
| Religious Match | 0.15 | -0.21 – 0.50 | 0.422 |
| Storyteller Religiosity | -0.09 | -0.24 – 0.05 | 0.216 |
| Prestige | 0.33 | 0.07 – 0.58 | **0.014** |
| Honesty | 0.77 | 0.60 – 0.93 | **<0.001** |
| Physical Reaction | 0.87 | 0.47 – 1.27 | **<0.001** |
| Emotional Reaction | 0.37 | -0.03 – 0.76 | 0.068 |
| Similarity | 0.73 | 0.27 – 1.18 | **0.002** |
| Supernatural Belief × Storyteller Religiosity | 0.02 | -0.05 – 0.09 | 0.586 |
| Supernatural Belief × Prestige | 0.10 | -0.02 – 0.23 | 0.109 |
| Supernatural Belief × Honesty | 0.08 | 0.00 – 0.17 | **0.041** |
| Supernatural Belief × Physical Reaction | -0.07 | -0.27 – 0.14 | 0.524 |
| Supernatural Belief × Emotional Reaction | -0.03 | -0.24 – 0.18 | 0.766 |
| Supernatural Belief × Similarity | 0.02 | -0.21 – 0.24 | 0.883 |
| **Random Effects** | | | |
| $\sigma^2$ | 3.11 | | |
| $\tau_{00\ ParticipantId}$ | 0.11 | | |
| ICC | 0.03 | | |
| $N_{\ ParticipantId}$ | 531 | | |
| Observations | 636 | | |
| Marginal $R^2$ / Conditional $R^2$ | 0.426 / 0.446 | | |

*Note.* A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights.

I was able to very closely replicate my previous findings in this new sample. Just like in Study 1, I found that credibility of other people's religious experiences was predicted by (a) whether they elicited emotional/physical reactions and were similar to one's own experiences; (b) storyteller religious knowledge, honesty, and perceived motives for sharing; and (c) participant religiosity and supernatural beliefs.

## Study 3 – Experimental Manipulation: Honesty X Prestige

Study 3 moves beyond the correlational findings from Studies 1 and 2, to employ an experiment manipulating storyteller honesty and prestige to test whether they affect story credibility. Both Christians and non-religious participants were recruited to test whether religious beliefs moderate the impact of the manipulated variables on testimony credibility. This study is also different in that participants were judging the stories of strangers instead of someone they know and therefore might use different sources of information when forming their judgement about the credibility of the story. Features of perceivers were again measured to provide additional correlational evidence to replicate findings from Study 1. The study preregistration can be found here: https://osf.io/3u75r/?view_only=5c29e8585b5d45c3acf6bc6a9bdac118

### Participants

In this study I recruited adult American participants from Prolific who self-identified as either Christians or non-religious. Their religious affiliation was confirmed in the demographics section of the study. I aimed to recruit a minimum of 200 participants (100 Christian, 100 non-religious) for each of the 4 conditions ($N = 800$). Any participants excluded from the final sample were replaced with new participants, until I reached the desired sample size. Preregistered exclusion criteria included failing an English comprehension check, two attention checks,

identifying as neither Christian nor non-religious, and a suspicion check. After checking the data, 75 responses were removed from the study for failing any of the preregistered attention check items. Participants received monetary compensation for completing the study. The final sample had a mean age of 37 years, with 482 identifying as women, 292 men, 21 non-binary, and 5 undisclosed. The sample was 68.88% White, 14.25% Black, 6.38% Hispanic or Latino, 3.88% East Asian, 2.88% Southeast Asian, 3.75% multiple or other ethnicities.

**Procedures**

Participants were first asked to complete a willingness to write full sentences check and English language comprehension items. They were then given the consent form to review and accept, followed by demographics questions. If the participant indicated that they belonged to any other religion than the ones we screened for on Prolific they were excluded from the study. Next, participants read vignettes resembling the stories collected in Study 1. Participants read descriptions of supernatural experiences that manipulated storyteller honesty and prestige in a between-subjects factorial design. Participants were randomly assigned to read one of four descriptions of the storyteller, randomly paired with one of four possible stories describing religious experiences.

After reading the story, participants reported whether they believed the story is true (i.e., the primary dependent measure of credibility) and rated other features of the story and storyteller (replicating measures from Studies 1 and 2). This was followed by measures of participant religiosity and supernatural belief (measured using the same questionnaires as previously). The study ended with a suspicion check followed by a request for feedback.

***Story Judgement Task***

Participants read about someone's religious experience and then reported how credible the story seemed to them. Prior to reading the story, participants read a short description of the storyteller that included information manipulated to convey either high/low prestige and honesty. For example, the following description would be shown to a participant in the high prestige-high honesty condition, for someone that identified as Christian:

> Participant #156 is 37 years old. Their highest education is Doctorate, and their occupation is Senior Manager at a large office. The participant's religious affiliation is Christian.
>
> Extraversion scale: 57
>
> Peer-report Prestige scale: 89
>
> Neatness scale: 63
>
> Honesty scale: 85
>
> Peer- report Honesty scale: 83
>
> Their scores represent an average level of Extraversion, high levels of Prestige according to family/friends, above average levels of Neatness, high levels of Honesty, and high levels of Honesty according to family/friends. The participant took 35 minutes to complete the study.

Prestige was manipulated both through general social status (education and employment) and peer-report score. Honesty was manipulated through a general score and a peer-report score. An interpretation of the scores was also added. To reduce the likelihood that participants would guess the study hypothesis, irrelevant filler information was included (i.e., extraversion and neatness). Storyteller religion was matched to participants' own religion. The order of presentation was also randomized (i.e., honesty information first or prestige information first) resulting in 8 different manipulations to which participants were randomly assigned between-

subjects. Participants then read about that person's religious experience and reported how credible the story seemed to them.

### *Story Credibility*

Participants rated the credibility of the story by answering 6 items, such as "*How certain are you that this participant was telling the truth about their experience?"* answered using a 7-point Likert-scale from 1 (*Definitely not true*) to 7 (*Definitely true*). An exploratory factor analysis was performed, and items 1 – 6 were averaged into a composite "credibility" score for analysis, with higher scores indicating more credible stories. Participants also reported if they had an emotional or physical reaction to the story they read (*Yes or No)* and if the event in the story was similar to any previous experience they had themselves (*Yes* or *No*).

### *Personal Beliefs*

The Religiosity Scale and the Supernatural Belief scale from Studies 1 and 2 were employed to measure religious commitment and belief in various supernatural entities.

## Results

A regression model was used to predict Story Credibility (composite score) from Storyteller Honesty (dummy coded: low honesty = 0, high honesty = 1), Storyteller Prestige (dummy coded: low prestige = 0, high prestige =1), participants' Supernatural Beliefs (standardized), and all of the possible interactions between them. The three predictors explained 37.4% of the variance in Story Credibility (Table 14). The model was significant, $F$ (7, 792) = 67.67, $p < .001$. Storyteller Honesty predicted Story Credibility ($b$ = .75, 95% CI [.50, .99], p < .001). Supernatural Belief ($b$ = .83, [.66, 1.00], p < .001) also predicted Story Credibility. Increased Storyteller Honesty led to increased Story Credibility for participants both high and

low in Supernatural Belief (Figure 3). Storyteller Prestige did not increase Story Credibility. Participants with stronger Supernatural Beliefs reported greater Story Credibility. The effect of Storyteller Honesty does not appear to depend on Storyteller Prestige nor Supernatural Beliefs.

Figure 3

*Storyteller Honesty and Prestige effects on Story Credibility by Participant Religious Affiliation*

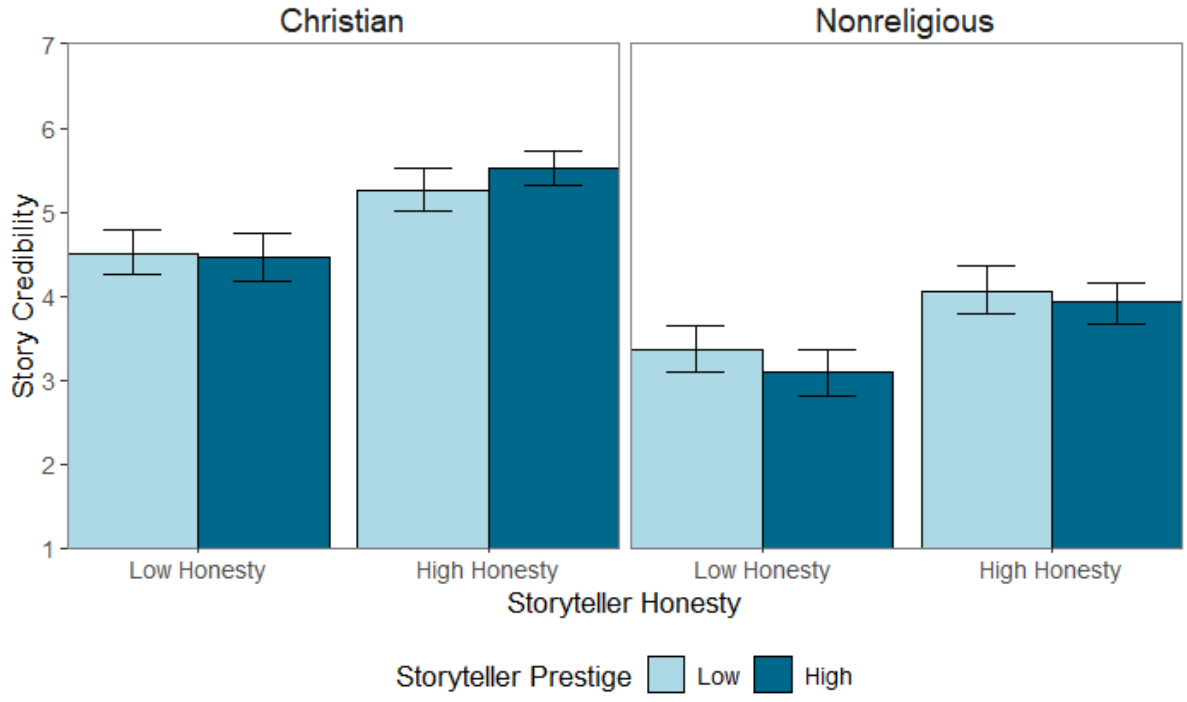


Table 14

*Results of multiple regression predicting Story Credibility from Storyteller Honesty, Prestige, and Participant Supernatural Belief*

| | Story Credibility | | |
|---|---|---|---|
| *Predictors* | *b* | *CI* | *p* |
| Intercept | 3.92 | 3.75 – 4.09 | **<0.001** |
| Storyteller Honesty | 0.75 | 0.50 – 0.99 | **<0.001** |
| Storyteller Prestige | -0.06 | -0.31 – 0.18 | 0.616 |
| Supernatural Belief | 0.83 | 0.66 – 1.00 | **<0.001** |
| Honesty × Prestige | 0.02 | -0.32 – 0.37 | 0.887 |
| Honesty × Supernatural Belief | -0.05 | -0.29 – 0.19 | 0.679 |
| Prestige × Supernatural Belief | 0.03 | -0.21 – 0.27 | 0.794 |
| Honesty × Prestige × Supernatural Belief | 0.18 | -0.17 – 0.52 | 0.315 |
| Observations | 800 | | |
| $R^2$ / $R^2$ adjusted | 0.374 / 0.369 | | |

*Note.* A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights.

## Study 4 – Experimental Manipulation: Honesty X Religious Affiliation

Study 4 experimentally investigated the influence of storyteller religious affiliation and storyteller honesty on perceived story credibility. Religious match was tested once again, since unlike study 2, this study specifically recruited equal numbers of Christian and non-religious participants, making it a better test of this prediction. This study followed mostly the same

procedures as Study 3. The study preregistration can be found here: https://osf.io/pk6rx/?view_only=f712598391b84d8e818e25ef016e1212

**Participants**

American participants who self-identified as either Christians or non-religious were recruited from Prolific. A minimum sample size of 200 participants (100 Christian, 100 non-religious) for each of the 6 conditions ($N = 1200$) was the goal of recruitment. Any participants excluded from the final sample were replaced with new participants, until the desired sample size was reached. The preregistered exclusion criteria were the same as in Study 3. After checking the data, 146 responses were removed from the study for failing any of the preregistered exclusion criteria. Participants received monetary compensation for completing the study. The final sample had a mean age of 39 years, with 743 identifying as women, 424 men, 25 non-binary, and 8 undisclosed. The sample was 66.17% White, 17.08% Black, 6.17% Hispanic or Latino, 4.17% East Asian, 2.33% Southeast Asian, 4.08% multiple or other ethnicities.

**Procedures**

Study 4 largely followed the procedures outlined in Study 3. Participants first indicated their willingness to write full sentences and completed English language comprehension items. Participants were then asked to answer a demographics questionnaire that included questions about their religious affiliation. Participants read descriptions of supernatural experiences that manipulated storyteller honesty and storyteller religious affiliation in a between-subjects factorial design. Participants were randomly assigned to read one of 6 descriptions of the storyteller, that was randomly paired with one of four stories describing religious experiences. After reading the story, participants reported whether they believed the story is true (story credibility measure), as

well as rated other features of their story and storyteller (same as Study 3), followed by measures of the participant's religiosity and supernatural belief. The study ended with a suspicion check followed by feedback request.

### *Story Judgement Task*

Participants read about someone's religious experience and then reported how credible the story seemed to them. Prior to reading a religious experience story, participants read a short description of the storyteller that included information that was manipulated to convey either high or low storyteller honesty, and to convey the storyteller's religious affiliation (Christian, Muslim, or Non-religious). Participants were randomly assigned to one of these 6 conditions.

### Results

A regression model predicted Story Credibility (composite score) from Storyteller Honesty (dummy coded: low honesty = 0, high honesty = 1), Storyteller Religious Affiliation (dummy coded with non-religious storytellers as the reference group), participants' Supernatural Beliefs (standardized), and all their interactions. The results of the regression indicated the three predictors explained 39.31% of the variance in Story Credibility, and the overall model was statistically significant, $F$ (11, 1188) = 69.95, $p < .001$. Increased Storyteller Honesty led to increased Story Credibility ($b$ = .70, 95% CI [0.46, 0.94], p < .001), and this relationship was true regardless of the level of the other variables, as indicated by the non-significant interactions with honesty (Table15). Participants with stronger Supernatural Beliefs reported greater Story Credibility ( $b$ = .95, 95% CI [0.78, 1.13], p < .001). There was also an interaction between supernatural belief and storyteller religion, such that the relationship between supernatural belief and story credibility is weaker for the Muslim storyteller, than for the Christian or non-religious

storyteller (Figure 4). Visual inspection of the effects of storyteller honesty and religious affiliation grouped by participant religion (Figure 5) indicated a trend whereby Christian participants judged Muslim stories as less credible than the other storytellers in both high and low honesty conditions. In contrast, nonreligious participants rated Muslim stories as more credible than the other two types in both the low and high honesty condition. This difference was only statistically significant for nonreligious participants in the high honesty condition.

Figure 4

*Predicted values of Story Credibility*

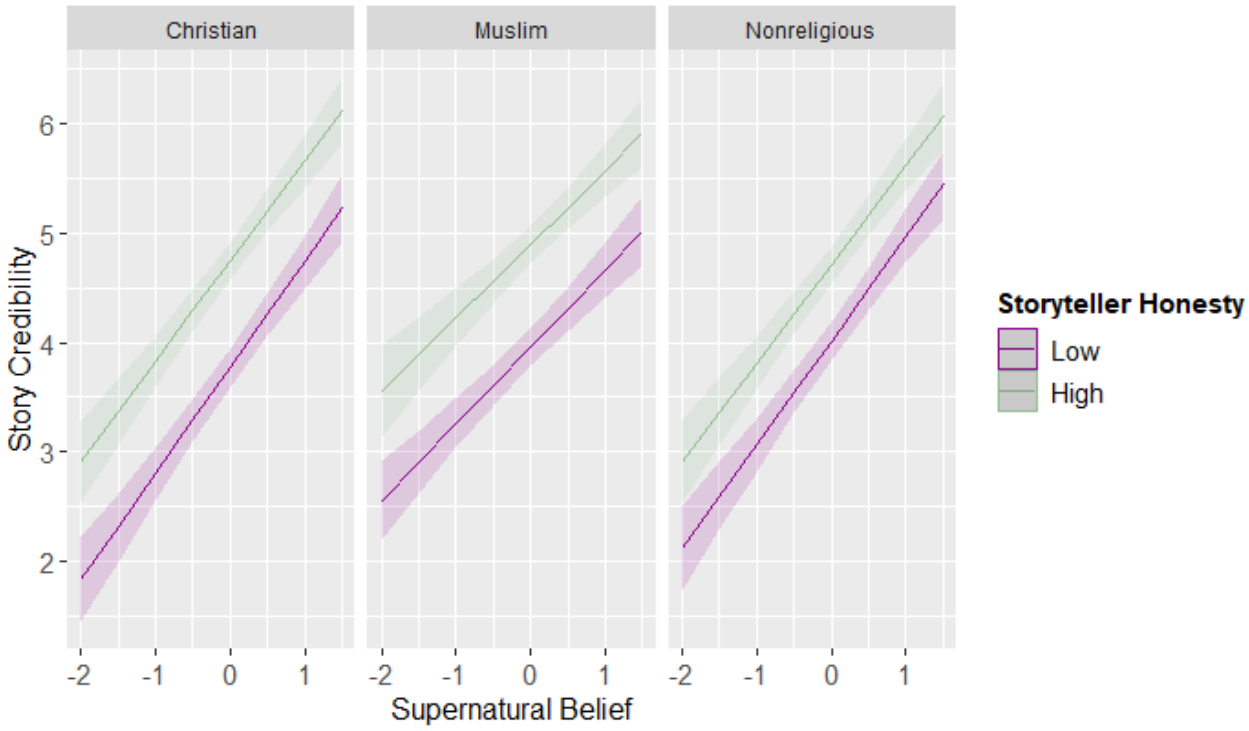


Table 15

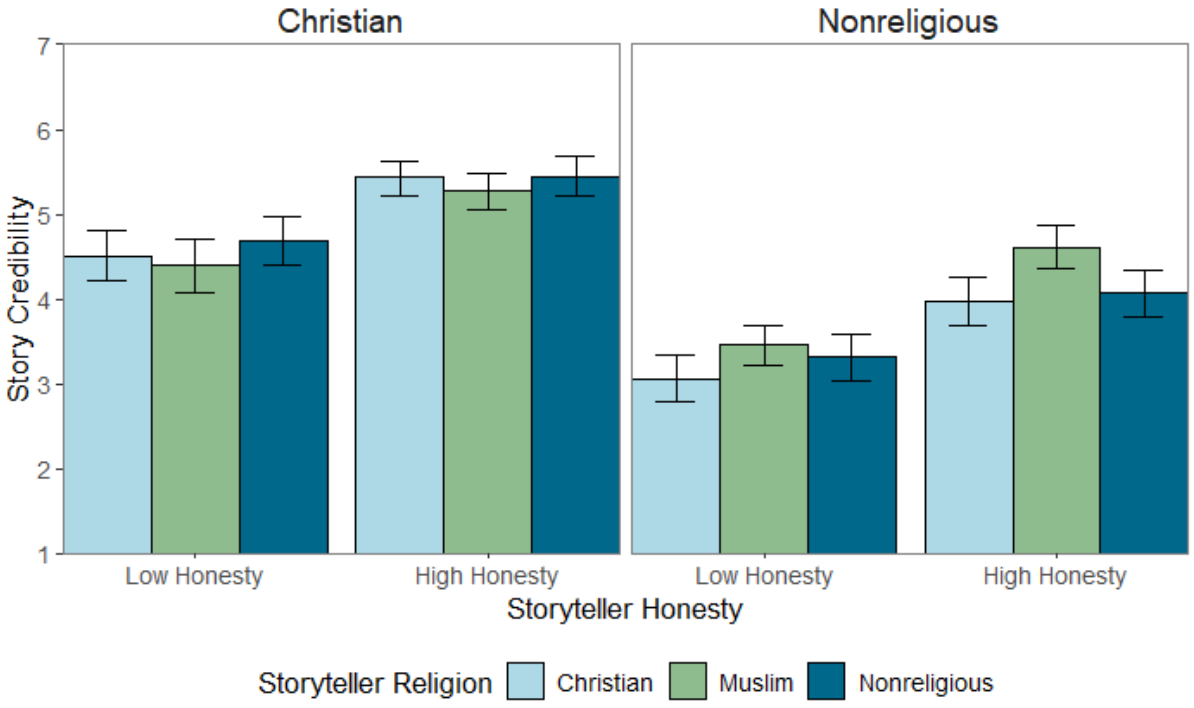
*Results of multiple regression predicting Story Credibility from Storyteller Honesty, Religion, and Participant Supernatural Belief*

| | Story Credibility | | |
|---|---|---|---|
| *Predictors* | *b* | *CI* | *p* |
| (Intercept) | 4.02 | 3.85 – 4.19 | **<0.001** |
| Storyteller Honesty | 0.70 | 0.46 – 0.94 | **<0.001** |
| Storyteller Christian | -0.25 | -0.49 – -0.01 | **0.043** |
| Supernatural Belief | 0.95 | 0.78 – 1.13 | **<0.001** |
| Storyteller Muslim | -0.06 | -0.30 – 0.19 | 0.649 |
| Storyteller Honesty × Storyteller Christian | 0.28 | -0.06 – 0.62 | 0.109 |
| Storyteller Honesty × Supernatural Belief | -0.05 | -0.29 – 0.19 | 0.701 |
| Storyteller Christian × Supernatural Belief | 0.02 | -0.22 – 0.26 | 0.873 |
| Storyteller Honesty × Storyteller Muslim | 0.24 | -0.10 – 0.58 | 0.167 |
| Supernatural Belief × Storyteller Muslim | -0.25 | -0.49 – -0.01 | **0.042** |
| Honesty Condition × Storyteller Christian × Supernatural Belief | -0.01 | -0.34 – 0.33 | 0.974 |
| Honesty Condition × Supernatural Belief × Storyteller Muslim | 0.02 | -0.33 – 0.37 | 0.908 |
| Observations | 1200 | | |
| $R^2$ / $R^2$ adjusted | 0.393 / 0.387 | | |

*Note.* A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights.

Figure 5

*Storyteller Honesty and Religious Affiliation effects on Story Credibility Grouped by Participant Religious Affiliation*




## General Discussion

This project investigated factors that predict the credibility of religious testimony by examining predictors in three domains: story features, storyteller features, and perceiver features. Across four studies, the findings shed light on how each of these characteristics shape perceptions of testimony credibility. By situating these predictors within a religious context, the studies advance psychological understanding of story persuasion and belief formation. Additionally, they offer valuable insights into how individual traits and contextual factors influence the evaluation and interpretation of religious narratives that are imbued with spiritual and cultural significance.

Across the studies, true stories were consistently rated as more credible than untrue ones, with sensory reactions and perceived similarity to personal experiences being strong predictors of credibility. These findings suggest that visceral and emotional responses are central to how individuals evaluate religious testimony. Storyteller honesty and religious knowledge were key features associated with credibility, with prestige and religious match also playing significant roles, particularly when honesty was weaker. Among perceiver features, supernatural belief, religiosity, and spiritual experiences predicted the sharing and credibility of true stories more strongly than untrue ones, highlighting the influence of personal belief systems on narrative evaluation.

These findings emphasize how different features studied in this project relate to established psychological theories of persuasion. For example, sensory reactions and perceived similarity to personal experiences might map onto the peripheral route of persuasion as they function as heuristic cues enhancing believability (Petty & Wegner, 1998). Conversely, the degree to which a narrative aligns with prior personal experience could be viewed as engaging central processing (Taves & Barlev, 2023), although most features examined—such as sensory reactions and storyteller honesty—likely rely more on peripheral mechanisms.

**Story Features**

Story features emerged as predictors of story credibility across all studies. Participants were more likely to report sensory reactions (e.g., chills, goosebumps) and perceived similarity to their own experiences when evaluating true stories, with these factors predicting certainty or credibility. Recency also played a role: true stories heard more recently were rated as more credible, whereas untrue stories had a weak negative correlation between recency and credibility. The consistent role of physical and emotional reactions underscores the persuasive power of

visceral responses, aligning with research suggesting that emotional arousal enhances message retention and persuasiveness (Mather & Sutherland, 2011). Similarly, the influence of similarity to personal experiences highlights the importance of perceived relevance in narrative persuasion, as evidenced by the strong association between these factors and credibility for true stories, supporting theories of identification and empathy in belief formation (Green & Brock, 2000). Such factors likely act as peripheral cues, where emotional and experiential dimensions drive acceptance without extensive cognitive scrutiny, enhancing believability by appealing to emotions and heuristic processing rather than engaging deeply with the message content (Petty & Cacioppo, 1986).

These findings build on theories emphasizing the role of emotional engagement and personal relevance in persuasion. Emotional engagement enhances memory and perceived plausibility, as shown in non-religious contexts (Hamby & Jones, 2022). The positive correlations between sensory reactions, similarity, and credibility suggest that these factors might act as heuristics that increase the believability of narratives, especially for true stories. By situating these findings in a religious context, this project demonstrates that narratives with spiritual content may engage emotional and experiential dimensions, supporting theories such as the Elaboration Likelihood Model (Petty & Cacioppo, 1986). Sensory reactions and similarity likely enhance central route processing by heightening the personal relevance and vividness of religious narratives. As noted in the introduction, the transmission of testimony in religious contexts often relies on the vividness and emotional salience of shared experiences, making these findings relevant to understanding how religious beliefs are maintained and disseminated.

**Storyteller Features**

The characteristics of the storyteller also influenced story credibility. Honest storytellers with greater religious knowledge and less to gain from their narrative were associated with judgements of greater credibility. In both Study 1 and Study 2, honesty was a robust predictor of certainty or credibility, correlating positively with both true and untrue stories but more strongly with true ones. The role of storyteller honesty aligns with longstanding research on source credibility, which emphasizes trustworthiness as a cornerstone of persuasive communication (Hovland & Weiss, 1951). Religious knowledge also positively predicted credibility, whereas perceived gain negatively predicted certainty, particularly for untrue stories.

Prestige correlated positively with credibility, especially for untrue stories, suggesting that certain social characteristics such as perceived status may serve as peripheral cues that compensates for perceived deficits in story authenticity when central factors, like possibly alignment with prior experiences, are weaker. Study 3 provided causal evidence for the role of honesty through experimental manipulation, demonstrating that participants rated storytellers perceived as honest as more credible. This causal relationship underscores the importance of honesty as a predictor of narrative persuasiveness, beyond mere correlational associations.

In Study 4, while storyteller Muslim affiliation for the storyteller was not a predictor of story credibility, Christian affiliation negatively impacted credibility compared to non-religious storytellers. This comparison suggests that participants' evaluations of credibility may be influenced by cultural or religious biases, with Christian storytellers potentially facing greater scrutiny, particularly from American non-Christian participants. In contrast, Muslim affiliation alone did not affect credibility in the same way. Interestingly, the interaction between Muslim affiliation and participant supernatural beliefs revealed a narrower range of credibility scores for

Muslim storytellers, compared to the broader range observed for Christian and non-religious storytellers. This pattern suggests that perceptions of Muslim storytellers may be more polarized, influenced by participant and cultural biases and preconceptions in the American context of the participants. When credibility was analyzed by storyteller honesty and participant religious affiliation, stories by Muslim storytellers were consistently rated lower in credibility than those by Christian and non-religious storytellers by Christian participants, regardless of honesty levels. In contrast, non-religious participants rated Muslim storytellers higher than the other two, with the most noticeable difference occurring in the high honesty condition. However, this difference was likely only statistically significant for non-religious participants in the high honesty condition, highlighting a limitation in the inferences that can be drawn about this trend. My theoretical expectations were that non-religious participants would view both Muslim and Christian storytellers as equally distinct from their own beliefs and rate them accordingly. However, the observed trend—where non-religious participants rated Muslim storytellers higher—suggests additional dynamics at play. This raises questions about how sociocultural factors influence evaluations of Muslim storytellers, with Christian participants possibly scrutinizing out-groups from a competing religion more critically and non-religious participants demonstrating a unique openness or bias in favor of Muslim storytellers under specific conditions. It is unfortunately not possible to know from these studies if these findings would generalize to other religions. Future research could explore both a variety of religions as well as participants' cultural environment. These nuanced findings regarding religious match and storyteller prestige suggest that cultural and social congruence amplify perceived authenticity, extending recent findings on the role of shared identity in trust-building (Levine et al., 2020), and underscoring the cultural and social dynamics that enhance perceived authenticity.

These findings contribute to our understanding of the role of source credibility in narrative persuasion. Although honesty and religious knowledge facilitated credibility judgments, these features likely engaged the peripheral routes to persuasion, as they rely on evaluations of the source rather than the content of the story itself (Petty & Cacioppo, 1986). Features such as perceived similarity to prior experiences, which directly relate to the story content, align more closely with central route processing (Petty & Cacioppo, 1986). The causal evidence from the experimental manipulation in Study 3 provides strong support for the role of honesty, demonstrating that it not only correlates with credibility but also causally influences it. Prestige, although less influential, likely acted as a peripheral cue that bolstered credibility when other factors were weaker, consistent with previous research on status characteristics and their role in influencing perceptions and interactions (Berger et al., 1972). The interplay between honesty and gain highlights the importance of epistemic vigilance, as individuals critically evaluate storytellers' motives to discern the authenticity of their narratives (Sperber et al., 2010). Additionally, the role of religious match underscores the significance of shared worldviews in fostering trust and believability, a key consideration that contributes to broader discussions on interfaith dialogue, intergroup dynamics, and general mutual understanding. The influence of storyteller characteristics in religious testimony reinforces broader psychological findings on source credibility and its pivotal role in belief transmission.

**Perceiver Features**

Individual differences in perceivers —including supernatural belief, religiosity, and spiritual experiences—also proved to be key predictors of story credibility. These traits consistently predicted sharing and evaluating true stories positively with weaker or negative relationships with untrue stories. Participants with stronger supernatural belief and religiosity

were more likely to find true stories credible, whereas these traits had minimal or negative correlations with untrue story evaluations. One possible explanation for this pattern is that true stories resonate more strongly with the existing belief systems and prior experiences of highly religious participants, making them more believable to them by amplifying the impact of factors like supernatural belief and religiosity. In contrast, untrue stories may lack this alignment, leading to greater skepticism by limiting the influence of these traits.

Interactions between story type and perceiver characteristics further highlighted how personal beliefs shape narrative evaluation. Participants with stronger supernatural belief were more likely to find storytellers honest and their stories credible, particularly in true story conditions. This aligns with research on belief congruence, in which individuals favor narratives that align with their worldview (Lindeman et al., 2019). Moreover, the findings that supernatural belief moderates the impact of storyteller characteristics provide further nuance, suggesting that individuals with stronger supernatural belief are more likely to integrate source credibility cues into their evaluations. By focusing on religious narratives, this project extends previous work by illustrating how perceiver traits not only shape acceptance but also guide epistemic filtering of testimony in culturally significant domains. This reinforces prior findings on how testimony serves as a mechanism for belief formation in children (Harris et al., 2018), while expanding it to adults as well, adding confidence that similar mechanisms likely operate across diverse levels of belief and personal experience.

**Limitations**

Although this project provides valuable insights into the predictors of religious testimony credibility, it is important to acknowledge two key limitations. First, the method used to collect shared stories may have constrained the range of factors examined. Participants shared stories via

structured prompts, which might have excluded organically relevant factors that emerge in natural storytelling contexts. As a result, there is a possibility that some critical elements influencing credibility in real-world scenarios were not captured. Future research could address this limitation by employing methods that allow for more naturalistic story-sharing, such as conversational interviews or ethnographic approaches, to identify additional influential factors.

Second, in the experiments, participants received stories through a computer interface rather than hearing them directly from the storyteller. This method reduced the range of interpersonal and contextual cues available for evaluation, removing things such as vocal tone, body language, or emotional delivery from the process. Consequently, participants may have placed disproportionate emphasis on the artificially selected factors provided in the study to compensate for the lack of naturalistic cues, potentially inflating their relative importance. Future studies could explore the effects of live storytelling or video-based presentations to better capture the dynamics of real-world narrative persuasion and the relative influence of additional factors.

Finally, although this project highlighted several robust predictors of credibility, other potentially influential factors, such as narrative complexity or storytelling style, were not examined. Future research could explore how these features interact with the identified predictors to shape narrative evaluation.

**Implications and Future Directions**

This project expands upon foundational theories of persuasion by examining how narrative credibility operates within the religious domain, with a focus on religious and supernatural beliefs. Although the current studies did not measure mechanisms such as central or peripheral processing directly, they raise questions about how these processes shape credibility

judgments in different contexts. For example, in Studies 1 and 2, participants shared stories told by someone they likely knew, which may have embedded perceptions of the storyteller's honesty in pre-existing schemas. Judgments of story credibility—asked immediately after sharing a story—were likely influenced by these schemas or other pre-existing beliefs about the storyteller, rather than active deliberation about honesty. This could suggest relying on heuristics, although further research is needed to explore this possibility.

In Studies 3 and 4, where participants evaluated highly controlled stories, honesty cues were embedded among other storyteller features, such as religious affiliation and prestige. Without a direct claim to story veracity, honesty in these contexts may have functioned implicitly, influencing judgments through heuristic pathways rather than overt cognitive scrutiny. The role of honesty across these contexts highlights the broader question of how credibility cues are processed when evaluating religious testimony and how beliefs interact with cognitive mechanisms to shape these judgments. Findings such as those by Schul, Mayo, and Burnstein (2004) suggest that distrust may lead to heightened analytical processing and reduced reliance on heuristics, offering a potential lens for understanding how participants assess credibility in situations where skepticism is activated, such as when the storyteller is from a different religion.

Other predictors, such as sensory reactions, perceived similarity to personal experiences, and epistemic vigilance, further underscore the role of beliefs in credibility assessments. These factors are particularly relevant to religious and supernatural beliefs, as sensory and experiential cues may act as heuristics that bolster credibility for narratives aligned with listeners' worldviews (Taves & Asprem, 2017). Meanwhile, epistemic vigilance may lead to heightened scrutiny in contexts where ulterior motives or inconsistencies are suspected (Sperber et al., 2010). Theoretical frameworks such as heuristics theory (Tversky & Kahneman, 1974) could offer

valuable perspectives for understanding these dynamics, particularly in identifying how credibility cues might interact with participants' pre-existing religious or supernatural beliefs.

The practical implications of these findings are wide-ranging. Study 4's insights into interfaith biases—with Christian participants rating Muslim storytellers as less credible and non-religious participants rating them as more credible—highlight the need for interventions that address prejudice and promote intergroup understanding. Leveraging shared experiences and fostering honest communication may mitigate biases and strengthen interfaith dialogue. Clinically, the findings align with research showing the therapeutic potential of religious narratives (Koening et al., 2016). Aligning storytelling interventions with clients' spiritual beliefs and prior experiences could enhance engagement and therapeutic outcomes. For instance, leveraging the persuasive power of honest storytelling and aligning narratives with the client's worldview could foster trust and openness. Additionally, the findings underscore the importance of addressing epistemic vigilance in educational contexts, helping individuals critically evaluate narratives while remaining open to diverse perspectives.

This research also contributes to broader psychological discussions about how narratives shape belief systems and social cohesion. For instance, the role of sensory and emotional reactions in enhancing narrative plausibility echoes Taves and Barlev's (2023) feature-based approach to studying non-ordinary experiences. Similarly, findings on storyteller credibility extend Taves & Barlev's exploration of source factors in anomalous narratives, emphasizing the interplay between honesty and prestige in making stories about unusual experiences more compelling.

Future research could explore how these dynamics unfold in other specific domains, such as political or health-related narratives, and examine the long-term influence of narrative credibility on belief and behavior. Additionally, the observed interaction between storyteller religion and perceiver beliefs warrants further investigation into the cultural dynamics of persuasion. Recent work on moral framing in communication (Feinberg & Willer, 2019) could provide a framework for examining how different moral and cultural values influence credibility judgments. Finally, addressing biases in narrative evaluation through targeted interventions could foster greater mutual respect and understanding across communities.

In conclusion, this project underscores the intricate interplay of story, storyteller, and perceiver features in shaping the credibility of religious testimony. By integrating findings across studies and identifying robust predictors such as honesty, sensory reactions, and supernatural belief, these findings contribute to the broader understanding of persuasion and belief formation in psychological science, while highlighting the unique dynamics of religious narratives. The nuanced understanding of how emotional, cultural, and cognitive factors converge offers a foundation for future research and practical applications, particularly in fostering respect and understanding across diverse communities.

**Ethical Considerations**

The studies were approved by the York Institutional Review Board (#e2023-375). Informed consent was obtained from all participants prior to participation, and confidentiality of data will be ensured throughout the studies.

## References

Berger, J., Cohen, B. P., & Zelditch, M. (1972). Status characteristics and social interaction. *American Sociological Review, 37*(3), 241–255. https://doi.org/10.2307/2093465

Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior*, *31*(5), 334–347. https://doi.org/10.1016/j.evolhumbehav.2010.02.004

Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society, 4*(3), 245–264. https://doi.org/10.1207/S15327825MCS0403_01

Derrick, B., Dobson-McKittrick, A., Toher, D., & White, P. (2015). Test statistics for comparing two proportions with partially overlapping samples. *Journal of Applied Quantitative Methods*, *10*(3), 1–14.

Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass, 13*(12). https://doi.org/10.1111/spc3.12501

Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology, 79*(5), 701–721. https://doi.org/10.1037/0022-3514.79.5.701

Hamby, A., & Jones, N. (2022). The effect of affect: An appraisal theory perspective on emotional engagement in narrative persuasion. *Journal of Advertising, 51*(1), 33–45. https://doi.org/10.1080/00913367.2021.1981498

Harris, P. L., & Corriveau, K. H. (2014). Learning from testimony about religion and science. In S. Einav & E. Robinson (Eds.), *Trust and skepticism: Children's selective learning from testimony* (pp. 28–41). Psychology Press.

Harris, P. L., & Corriveau, K. H. (2021). Beliefs of children and adults in religious and scientific phenomena. *Current Opinion in Psychology*, *40*, 20–23. https://doi.org/10.1016/j.copsyc.2020.08.003

Harris, P. L., Koenig, M. A., Corriveau, K. H., & Jaswal, V. K. (2018). Cognitive Foundations of Learning from Testimony. *Annual Review of Psychology*, *69*(1), 251–273. https://doi.org/10.1146/annurev-psych-122216-011710

Heiphetz, L., Landers, C. L., & Van Leeuwen, N. (2021). Does think mean the same thing as believe? Linguistic insights into religious cognition. *Psychology of Religion and Spirituality*, *13*(3), 287–297. https://doi.org/10.1037/rel0000238

Hong, Z., & Henrich, J. (2021). The Cultural Evolution of Epistemic Practices: The Case of Divination. *Human Nature*, *32*(3), 622–651. https://doi.org/10.1007/s12110-021-09408-6

Hoogeveen, S. (2021). Religious authority and epistemic trust: Perceived knowledge in a religious context. *Psychological Studies, 66*(4), 567–582. https://doi.org/10.1007/s12646-021-00597-4

Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly, 15*(4), 635–650.

Lee, K., & Ashton, M. C. (2018). Psychometric Properties of the HEXACO-100. *Assessment*, *25*(5), 543–556. https://doi.org/10.1177/1073191116659134

Levine, E. E., Bitterly, T. B., Cohen, T. R., & Schweitzer, M. E. (2018). Who is trustworthy? Predicting trustworthy intentions and behavior. *Journal of Personality and Social Psychology, 115*(3), 468–494. https://doi.org/10.1037/pspi0000136

Lindeman, M., Van Elk, M., Lipsanen, J., Marin, P., & Schjødt, U. (2019). Religious Unbelief in Three Western European Countries: Identifying and Characterizing Unbeliever Types Using Latent Class Analysis. *The International Journal for the Psychology of Religion*, *29*(3), 184–203. https://doi.org/10.1080/10508619.2019.1591140

Luhrmann, T. M. (2012). *When God talks back: Understanding the American evangelical relationship with God* (First Vintage Books edition). Vintage Books.

Luhrmann, T. M. (2020). *How God becomes real: Kindling the presence of invisible others*. Princeton University press.

Mather, M., & Sutherland, M. R. (2011). Arousal-Biased Competition in Perception and Memory. *Perspectives on Psychological Science, 6*(2), 114-133. https://doi-org.ezproxy.library.yorku.ca/10.1177/1745691611400234

McLoughlin, N., Jacob, C., Samrow, P., & Corriveau, K. H. (2021). Beliefs about Unobservable Scientific and Religious Entities are Transmitted via Subtle Linguistic Cues in Parental Testimony. *Journal of Cognition and Development*, *22*(3), 379–397. https://doi.org/10.1080/15248372.2020.1871351

Mercier, H. (2022). *Not born yesterday: The science of who we trust and what we believe* (First paperback printing). Princeton University Press.

Morgan, T. J. H., Rendell, L. E., Ehn, M., Hoppitt, W., & Laland, K. N. (2012). The evolutionary basis of human social learning. *Proceedings of the Royal Society B: Biological Sciences*, *279*(1729), 653–662. https://doi.org/10.1098/rspb.2011.1172

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer-Verlag.Shtulman, A. (2013). Epistemic similarities between students' scientific and supernatural beliefs. *Journal of Educational Psychology*, *105*(1), 199–212. https://doi.org/10.1037/a0030282

Petty, R. E., & Wegener, D. T. (1998). Attitude change: Multiple roles for persuasion variables. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 323–390). McGraw-Hill.

Proctor, J. (2006). Religion as Trust in Authority: Theocracy and Ecology in the United States. *Annals of the Association of American Geographers*, *96*(1), 188–196. https://doi.org/10.1111/j.1467-8306.2006.00508.x

Sperber, D., Clément, F., Heintz, C., Mascaro, O., Mercier, H., Origgi, G., & Wilson, D. (2010). Epistemic Vigilance. *Mind and Language*, *25*(4), 359–393.

Schul, Y., Mayo, R., & Burnstein, E. (2004). Encoding Under Trust and Distrust: The Spontaneous Activation of Incongruent Cognitions. *Journal of Personality and Social Psychology, 86*(5), 668–679. https://doi.org/10.1037/0022-3514.86.5.668

Shtulman, A. (2013). Epistemic similarities between students' scientific and supernatural beliefs. *Journal of Educational Psychology, 105*(1), 199–212. https://doi.org/10.1037/a0030282

Taves, A. (2023). The role of experience in making Gods and spirits real. *Religion, Brain & Behavior*, *13*(1), 67–72. https://doi.org/10.1080/2153599X.2022.2050790

Taves, A., & Asprem, E. (2017) Experience as event: event cognition and the study of (religious) experiences. *Religion, Brain & Behavior, 7(1)*1, 43-62, DOI:10.1080/2153599X.2016.1150327

Taves, A., & Barlev, M. (2023). A feature-based approach to the comparative study of "nonordinary" experiences. *American Psychologist*, *78*(1), 50–61. https://doi.org/10.1037/amp0000990

Tormala, Z. L., Briñol, P., & Petty, R. E. (2006). When credibility attacks: The reverse impact of source credibility on persuasion. *Journal of Experimental Social Psychology, 42*(5), 684–691. https://doi.org/10.1016/j.jesp.2005.10.005