

# To Be Immortal, Do Good or Evil

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## Abstract

Many people believe in immortality, but *who* is perceived to live on and *how* exactly do they live on? Seven studies reveal that good- and evil-doers are perceived to possess more immortality—albeit different kinds. Good-doers have “transcendent” immortality, with their souls persisting beyond space and time; evil-doers have “trapped” immortality, with their souls persisting on Earth, bound to a physical location. Studies 1 to 4 reveal bidirectional links between perceptions of morality and type of immortality. Studies 5 to 7 reveal how these links explain paranormal perceptions. People generally tie paranormal events to evil spirits (Study 5), but this depends upon location: Evil spirits are perceived to haunt houses and dense forests, whereas good spirits are perceived in expansive locations such as mountaintops (Study 6). However, even good spirits may be seen as trapped on Earth given extenuating circumstances (Study 7). Materials include a scale for measuring trapped and transcendent immortality.

## Keywords

immortality, morality, death, supernatural, paranormal

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Everybody dies. But to many people, death is not the end of life. The majority of people around the world believe that, although death destroys the body, the soul continues to live on. In Christian doctrine, souls transmigrate to heaven or hell; in Hinduism, souls are perpetually reborn into different forms; in Shinto, souls travel to one of many spiritual realms, including a paradise, an underworld, or a world just beyond the sea; in Yoruba, the souls of the dead are reborn back into their immediate family (Lawal, 1977). Even people who are not religious often speak as if the death is not a “period” but an “ellipse,” suggesting that their grandfather is “still with us” or their mother is “watching over us.” The intuition that the immaterial soul survives after material death makes sense given the prevalence of dualism in children (Bering & Bjorklund, 2004; Bloom, 2004) and adults (Gray, Knickman, & Wegner, 2011). However, even if people generally believe that others live on, they may not believe that all souls persist equally. The question is, “*Who* enjoys the most immortality?”

We suggest that immortality is tied to morality, such that the good and evil live on most strongly in the minds of people—though they may live on in different ways. Good people may have transcendent immortality, with their souls escaping the Earth to enjoy spiritual liberty. On the contrary, evil people may have trapped immortality, with their souls bound to a particular location—perhaps explaining why evil souls seem more linked to paranormal activity in ritual and popular culture. In this article, we examine the immortality of morality.

## Who Becomes Immortal?

At first glance, morality appears to have no bearing on the likelihood of immortality: In almost every spiritual doctrine, all souls are equally likely to persist after death regardless of how they used their time on earth. Nevertheless, folktale, ritual, and everyday language hint that people describe the persistence of “good” and “evil” souls more than nonmoral souls (Allison, Eylon, Beggan, & Bachelder, 2009). In East African folk accounts of life after death, ghosts are seen to act either benevolently (supporting loved ones) or malevolently (causing the death of crops; Hallpike, 2008; Shipton, 1989). The belief in good and bad spirits also characterizes small South Asian (Bailey, 1863; Gurdon, 1907), East Asian (Tang & University of Washington, Far Eastern and Russian Institute, 1956), and Pacific Island (Erdland, 1914) spiritual belief systems. It also appears in the world’s largest religions (Parkin, 1985), including Christianity. Although Christian belief suggests that souls can live on in many spiritual places, including Purgatory (Le Goff, 1986) and Limbo (Capps &

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Carlin, 2010), the locations of Heaven (where the good live) and Hell (where the evil live) receive the most attention.

The persistence of good and evil souls aligns well with research on mind perception and moral psychology (Wegner & Gray, 2017). Moral character dominates our impressions of people (Goodwin, Piazza, & Rozin, 2014) and is a defining element of both living people (Strohming & Nichols, 2014) and the immortal soul (Bering, 2006). Research on mind perception also finds that both moral and immoral deeds transform people's minds to be more powerful and durable (Gray, 2010; Gray & Wegner, 2009), providing potential resilience against the assault of death. In this sense, perceiving good and evil souls as persisting after death may be a cognitive outgrowth of how we perceive good and evil minds during life. As moral and immoral minds are especially salient and powerful, these are the minds that may persist most clearly in the afterlife, albeit in potentially different forms.

## Two Forms of Immortality

People may bestow immortality onto good and evil souls alike, but the *type* of immortality that they bestow appears to differ on the basis of morality—whereas good souls are described as living on in a *transcendent* state, evil souls tend to be *trapped*. Reflecting this duality, Christianity, Hinduism, and Zoroastrianism all have locations where the evil are confined for all eternity (in Hell, Samsara, and the House of Lies, respectively), and where the good perpetually live in freedom (in Heaven, Moksha, and the House of Song, respectively). This evidence from organized religions is only suggestive, however. As large religions serve important functions for social regulations (Durkheim, 1912; Norenzayan, 2013)—and often reflect arcane theological principles (Lossky, 1974)—their accounts of the immortality of good and evil might not reflect people's natural beliefs.

The view that good souls persist ethereally whereas evil souls persist in a contained state also appears in smaller, less formal spiritual belief systems. In Iroquois religious tradition, the spirits of the evil dead are believed to be eternally confined to their homes (Parker, 2017), whereas in South America, the Goajiro will light bonfires in honor of good people to illumine their paths to the afterlife (de Pineda, 1950). In societies that believe in spiritual possession, evil spirits are much more likely to possess physical objects or beings compared with good spirits (Lewis, 1971), suggesting that people naturally view evil souls as trapped, whereas good souls are transcendent.

Even in modern society, evil souls are often seen as bound to the Earth. When Jacob Marley dies in Dickens's (1843) *A Christmas Carol*, his greed condemns his soul to wander the Earth. When Voldemort first dies in the Harry Potter series, his evil soul continues to live on in specific objects called Horcruxes (Rowling, 2014). In contrast, good souls are often seen as existing in a transcendent state. After the death of Obi-Wan Kenobi

in the popular film series *Star Wars*, his spirit continues to appear, watch over, and communicate to Luke from the ethereal realm of the Force (Keshner, Kurtz, & Lucas, 1980).

These different perceived forms of immortality for good and evil are likely supported by basic motivations. Supernatural beliefs—including those about the afterlife—are influenced by human motivations such as the need for control (Kay, Gaucher, McGregor, & Nash, 2010; Purzycki et al., 2016) and coordination (Caluori, Jackson, & Gelfand, 2017). People possess a strong motivation for justice, desiring that those who do evil are punished whereas those who do good are rewarded (Carlsmith, Darley, & Robinson, 2002). People may therefore be naturally motivated to see evil souls as trapped and contained—less able to hurt living people, and more likely to suffer—and to see good souls as liberated and transcendent—more able to watch over others, and rewarded for a life of good deeds.

Fundamental cognitive associations (Barsalou & Wiemer-Hastings, 2005) may also encourage people to see evil souls as trapped and good souls as transcendent. People tend to understand abstract concepts through concrete metaphors (Casasanto, 2009), such as when personable people are described as “warm” and aloof people are described as “cold.” The same metaphorical understanding is used with concepts good and evil. Good is tied to concepts of lightness, brightness, and airiness, whereas evil is tied to heaviness, darkness, and constriction (Barsalou, 1999; Gibbs, 1992). Research on emotion and contagion also suggests that evil is often bound to specific objects (Rozin & Royzman, 2001), and can only be nullified by goodness—which in turn is associated with the concept of “elevation” (Rozin, Haidt, & McCauley, 2008). These basic associations mean that evil souls naturally conjure up images of being trapped, whereas good souls naturally conjure up images of transcendence.

## Immortality, Morality, and Paranormal Experience

If people see good and evil souls as experiencing different forms of immortality, it might explain popular understandings of paranormal experience. Across many books and films, when characters encounter a ghost, it is almost always of a person who was evil in life, such as a serial killer (Talalay, 1993), a greedy banker (Dickens, 1843), or a depraved nobleman (Wilde, 2011). The evilness of ghosts also has anecdotal support from cross-cultural ethnography. Among Australia Aboriginals, for example, house-smoking rituals disproportionately involve malevolent spirits rather than benevolent ones (Clarke, 2011), reflecting a common belief that evil but not good souls occupy houses after physical death.

Popular accounts suggest that evil spirits maintain a paranormal presence on Earth because they are barred from departing for the afterlife, such as the *Flying Dutchman*, condemned to sail the oceans forever (Bonner, 1946). These accounts further suggest that once evil souls are allowed to

leave contained places, their ghostly manifestations end. This suggests a tension between trapped and transcendent immortality that may go beyond good and evil. If a good spirit was prevented from departing for the afterlife, it might be expected to maintain a paranormal presence, and if an evil spirit was allowed to leave for the afterlife, it might be expected to have minimal paranormal presence.

Understanding immortality as trapped versus transcendent suggests the nature of the physical location should also matter when it comes to the paranormal. When people detect immortal souls in houses, caves, and similarly contained places, they should be more likely to infer malevolence to these spirits, but when they detect immortal souls in less contained places—such as deserts, tundra, and mountaintops—they should be more likely to infer benevolence.

## Current Research

Seven studies address three research questions related to immortality and (im)morality. First, are perceptions of immortality associated with morality (Study 1)? Second, do good and evil souls live on differently—good as transcendent and evil as trapped (Studies 2-4)? Third, do these different forms of immortality help us understand perceptions of the paranormal (Studies 5-7)? Although religious belief undoubtedly plays a role in perceptions of immortality (Jong & Halberstadt, 2016), we wanted to examine elementary intuitions about immortality, and so controlled for explicit supernatural beliefs in our multiple regression models. Even with this control, we predicted that people would tie immortality to morality and would see good and evil as living on differently.

## Study 1: Immortality and (Im)morality Across Historical Figures

This first study examined perceptions of deceased historical figures, comparing the perceived immortality of people who were good or evil in life with people who were neither. As participants might perceive a familiar person as more likely than an unfamiliar one to attain immortality, we controlled for familiarity in each of our analyses. We also measured how much people wished that a historical figure was living on, so that we could control for people's desire to reward virtuous individuals.

### Method

**Participants.** Given the lack of past similar research, it was difficult to estimate the potential effect size and calculate a power analysis. One hundred participants seemed sufficient for a within-subjects study, and so we recruited that many subjects for 50 cents each on Amazon Mechanical Turk. Of our original sample, 95 completed the study (49 men, 46 women;  $M_{\text{age}} = 39.12$ ,  $SD = 11.87$ ).

### Procedure

**Deceased exemplars.** Participants rated 15 famous figures. Five of these exemplars were preselected to be good (Martin Luther King Jr., Mohandas Gandhi, Abraham Lincoln, Nelson Mandela, Socrates), five were selected to be evil (Joseph Stalin, Osama Bin Laden, Adolf Hitler, Ted Bundy, Attila the Hun), and five were selected to be nonmoral (Ted Williams, Amelia Earhart, Andy Warhol, Nelson Rockefeller, Edgar Allen Poe).

**Dependent variables.** For each exemplar, participants rated (a) the extent to which each person had maintained a degree of immortality, (b) the extent to which participants wanted each person to live on, (c) the morality of each person, and (d) whether participants were familiar with each person. Participants indicated their familiarity on a binary scale, but made all other ratings on a continuous 1 to 100 scale. Both the order of the ratings and the order of exemplars within ratings were randomized.

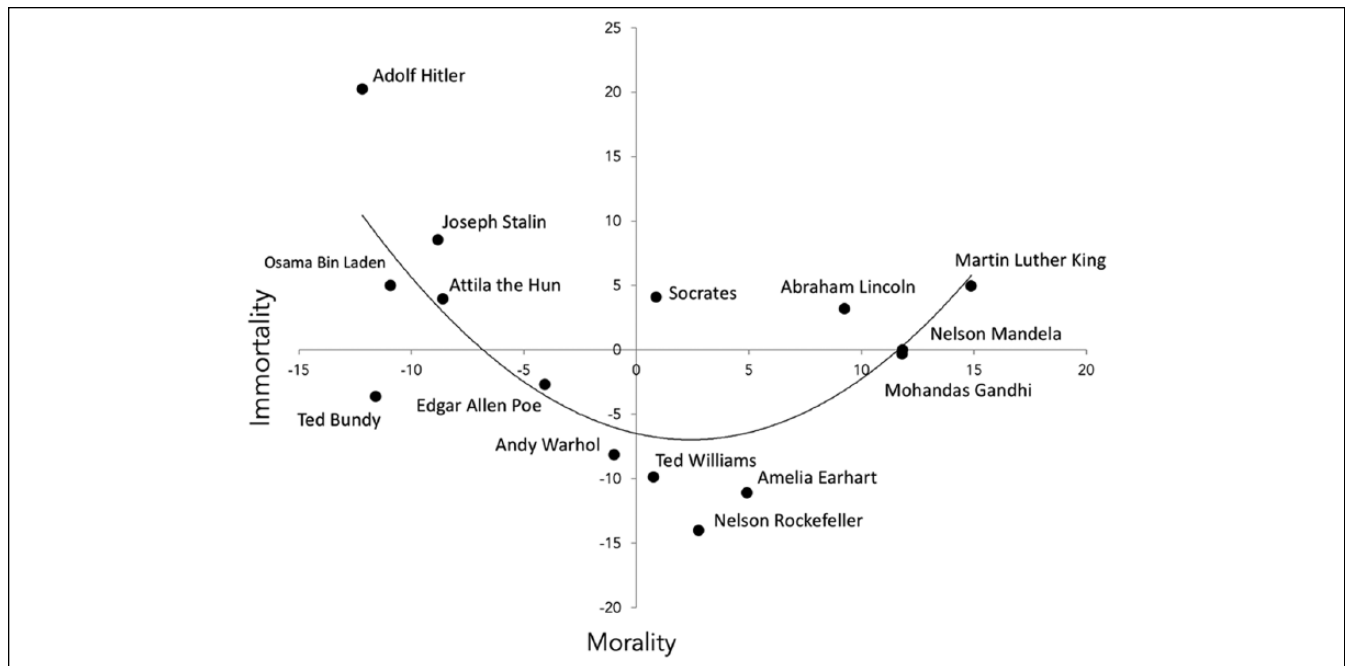
After making these ratings, participants filled out the 10-item Supernatural Beliefs Scale (Jong, Bluemke, & Halberstadt, 2013), on which participants rated their agreement on a 9-point scale anchored at 1 (*strongly disagree*) and 9 (*strongly agree*) with several statements pertaining to supernatural entities common to Western religious beliefs (e.g., "There exists an all-loving, all-knowing, all-powerful God"). Participants then completed demographics and debriefing.

**Analytic strategy.** To test for the relationship between immortality and morality, we conducted a multilevel model, with 1,425 observations nested within 95 participants. In this model, we tested for linear and quadratic effects of participants' continuous morality ratings on the perceived immortality of each target. We also controlled for participants' religious beliefs and ratings of exemplar familiarity, and ran analyses with and without participants' ratings of desire for the exemplar to live on, to test for how participants' motivations shaped their perceptions of exemplar immortality.

All independent variables—with the exception of religious belief—were entered as Level 1 predictors, as they varied at the level of the observation. Religious belief was entered as a Level 2 predictor, varying at the level of the participant. Intercepts were modeled as varying randomly across participants to take into account the nested structure of the data. The intraclass correlation coefficient was robust (Wald  $Z$   $p < .001$ ), indicating that participant-level variance accounted for 40% of variance in people's ratings immortality.

### Results

**Immortality across morality condition.** Were good and evil exemplars especially likely to live on? Analyses of perceived morality predicted perceived immortality linearly,  $b = 0.34$ ,  $SE = .02$ ,  $t(1347) = 18.32$ ,  $p < .001$ ,  $f^2 = .19$ , 95% confidence interval [CI] = [0.31, 0.38], suggesting that people generally perceived morally good people as living on—likely because



**Figure 1.** Perceived Immortality of Historical Figures (Study 1). People perceive good and evil historical figures as living on more than nonmoral historical figures after death. Means have been adjusted to control for participants' familiarity with historical figures, religious belief, and motivation for each figure to live on.

they wanted good people to live on more. Importantly, there was also a significant quadratic of morality and perceived immortality,  $b = 0.005$ ,  $SE = .0008$ ,  $t(1378) = 7.17$ ,  $p < .001$ ,  $f^2 = .02$ , 95% CI = [0.004, 0.007], which reveals that both good and evil historical figures are seen to live on.

Controlling for participants' motivations for targets to live on greatly reduced the size of morality's linear effect on immortality,  $b = 0.09$ ,  $SE = .03$ ,  $t(1394) = 2.64$ ,  $p = .01$ ,  $f^2 = .02$ , 95% CI = [0.02, 0.16], but left morality's quadratic effect unchanged,  $b = 0.005$ ,  $SE = .0007$ ,  $t(1381) = 7.20$ ,  $p < .001$ ,  $f^2 = .02$ , 95% CI = [0.004, 0.007]. This suggests that people are generally motivated for good people to become immortal, but have an independent tendency to perceive both good and evil individuals as living on after death. This effect is displayed in Figure 1.

## Discussion

As predicted, historical figures' perceived immortality was tied to their (im)morality. Although people generally *wanted* good-doers (but not evil-doers) to live on, they perceived both extremely good and extremely evil individuals as living on after death—even when controlling for the relative influence of their lives.

## Study 2: Two Kinds of Immortality

Study 1 revealed that perceived immortality is tied to perceived morality, but did not measure how people understand the nature of immortality. In Study 2, we developed indices of

“trapped” and “transcendent” immortality, and tested whether people see evil souls as living on in a trapped state, but good souls living on in a transcendent state.

## Method

**Participants.** One hundred and fifty participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. One hundred forty-six people completed the study (76 men, 70 women;  $M_{age} = 38.27$ ,  $SD = 12.40$ ). Our sample left us with 99% power to detect medium-size effects ( $f^2 = .25$ ), 89% power to detect small effects ( $f^2 = .10$ ).

**Procedure.** Participants were randomly assigned to read three short biographies of deceased male or female exemplars, before answering questions about each exemplar.

**Deceased exemplars.** The male exemplars included civil rights activist Martin Luther King Jr. (good), serial killer Ted Bundy (evil), and entrepreneur Marcel Bich (founder of the Bic Corporation—nonmoral). The female exemplars included Mother Teresa (good), serial killer Myra Hindley (evil), and golfer Estelle Lawson Page (nonmoral). See the appendix for biographies.

**Two kinds of immortality.** To measure transcendent and trapped immortality, we developed two four-item scales, with each item rated using a 7-point scale from *strongly disagree* (1) to *strongly agree* (7).

The Transcendent Immortality subscale: “How likely is a part of [target] to . . . (1) have transcended the earth, (2) have moved on to the afterlife, (3) have spiritual liberty, and (4) live beyond space and time.”

The Trapped Immortality subscale: “How likely is a part of [target] to . . . (1) be trapped on earth as a spirit, (2) have been kept out of the afterlife, (3) be spiritually contained in one place, and (4) spiritually occupy a particular location.”

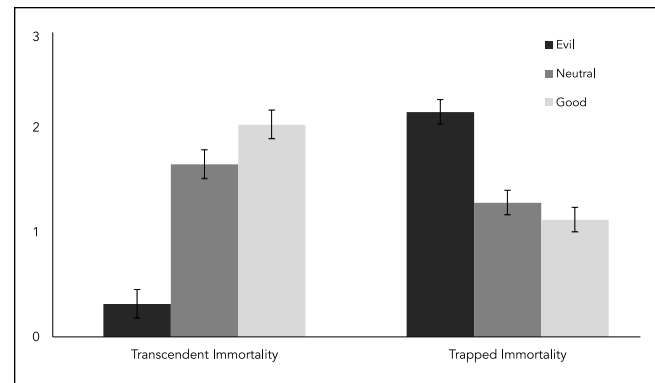
**Religious belief.** To measure religious belief, we used the 10-item Supernatural Beliefs Scale (Jong et al., 2013) as in our pilot study.

**Factor analyzing types of immortality.** Before using our scales for transcendent and trapped immortality items, we first tested their coherence using factor analysis—Would these items cluster together in the predicted two kinds of immortality? Aggregating across specific exemplars, we performed a factor analysis with Varimax rotation on eight immortality variables. This analysis revealed a clear two-factor solution, with the first factor explaining 55% of variance (eigenvalue = 4.42) and including each of the “transcendent” items with  $>.70$  loadings, and the second factor explaining 23% of variance (eigenvalue = 1.84) and including the four “trapped” items with  $>.70$  loadings. No items cross-loaded on both scales at higher than  $.40$ . Follow-up reliability analyses showed that the transcendent immortality ( $\alpha = .92$ ) and trapped immortality ( $\alpha = .88$ ) scales were both highly reliable.

**Analytic strategy.** To test our hypotheses, we conducted two multilevel models predicting participants’ ratings of (a) transcendent immortality and (b) trapped immortality. Each model contained 438 observations nested in 146 participants, with target gender and target morality entered as Level 1 variables, and religious belief entered as a Level 2 variable. Intercepts were modeled as randomly varying across participants to account for the nested data structure. As morality was a three-level categorical variable, it was entered as two dummy-coded variables representing (a) the contrast between bad targets and neutral targets, and (b) between good targets and neutral targets. The intraclass correlation coefficients for the transcendent (.50) and trapped (.53) models were each robust (Wald  $Z p < .001$ ), indicating that participant-level variance accounted for a 50% and 53% of variance in people’s ratings of transcendent and trapped immortality, respectively.

## Results

**Immortality across morality.** Do good and evil people live on differently? People rated evil targets as significantly more likely to live on in a trapped state compared with neutral targets,  $b = 0.87$ ,  $SE = .12$ ,  $t(290) = 7.33$ ,  $p < .001$ ,  $f^2 = .06$ , 95% CI = [0.63, 1.10], whereas good targets were no more likely



**Figure 2.** Perceived Immortality across Morality (Study 2). Well-known deceased good and evil exemplars were seen as more immortal than deceased nonmoral exemplars. However, good people have transcendent immortality whereas evil people have trapped immortality. Error bars represent standard errors. Means have been adjusted to control for target gender, and religious belief.

to live on in a trapped state compared with neutral targets,  $b = -0.16$ ,  $SE = .12$ ,  $t(290) = -1.38$ ,  $p = .17$ ,  $f^2 = .002$ , 95% CI = [-0.39, 0.07]. Conversely, people rated good targets as significantly more likely to live on in a transcendent state compared with neutral targets,  $b = 0.38$ ,  $SE = .13$ ,  $t(290) = 2.87$ ,  $p = .005$ ,  $f^2 = .01$ , 95% CI = [0.12, 0.64], whereas evil targets were rated as significantly less likely to live on in a transcendent state compared with neutral targets,  $b = -1.33$ ,  $SE = .13$ ,  $t(290) = -10.06$ ,  $p < .001$ ,  $f^2 = .16$ , 95% CI = [-1.59, -1.07]. The effects of morality on transcendent and trapped immortality are displayed in Figure 2.

**Immortality across exemplar gender.** Female and male targets were rated as similarly likely to live on in a transcendent state,  $b = 0.01$ ,  $SE = .19$ ,  $t(142) = 0.06$ ,  $p = .95$ ,  $f^2 = .001$ , 95% CI = [-0.35, 0.38], and a trapped state,  $b = 0.06$ ,  $SE = .20$ ,  $t(142) = 0.31$ ,  $p = .76$ ,  $f^2 = .001$ , 95% CI = [-0.33, 0.45].

**Immortality across religious belief.** Religious belief positively predicted people’s ratings of both trapped,  $b = 0.16$ ,  $SE = .04$ ,  $t(142) = 4.34$ ,  $p < .001$ ,  $f^2 = .02$ , 95% CI = [0.09, 0.24], and transcendent,  $b = 0.30$ ,  $SE = .04$ ,  $t(142) = 8.64$ ,  $p < .001$ ,  $f^2 = .08$ , 95% CI = [0.23, 0.38], immortality.

## Discussion

This study provided further support for the link between morality and immortality, and suggested that there are two kinds of immortality: trapped and transcendent. People view good souls as possessing transcendent immortality and evil souls as possessing trapped immortality. One limitation of Studies 1 and 2 was the use of well-known exemplars, and historical figures may have had idiosyncratic effects on perceived immortality. Study 3 addressed this limitation by directly manipulating morality with fictional exemplars.

### Study 3: How Fictional Exemplars Live On

Study 3 tested whether people believe that fictional good souls attain transcendent immortality while fictional evil souls attain trapped immortality.

#### Method

**Participants.** Three hundred ten participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. Three hundred four participants (160 men, 142 women, 2 unspecified;  $M_{age} = 36.11$ ,  $SD = 12.34$ ) completed the study. We chose to double our Study 1 sample size, given Study 1's small effect sizes ( $f^2$  of approximately .05-.10). With three parameters and 304 participants, we had 92% power to detect small effects of  $f^2 = .05$ .

**Procedure.** Participants were randomly assigned to read three short biographies of either fictional male or fictional female exemplars, before answering questions about each exemplar. As in Study 1, exemplars varied systematically by their morality.

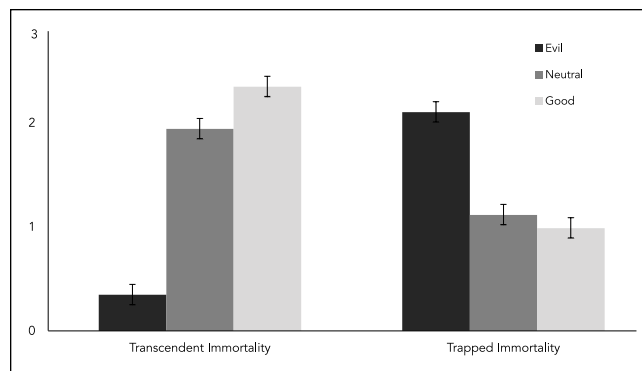
**Exemplars.** For the good exemplar, participants read about Michael (Michelle) Spencer, a heroic doctor who saved the lives of thousands of adults and children over his (her) career. For the neutral exemplar, participants read about Eugene (Eunice) Benning, a successful American businessperson whose business deals were sometimes generous and sometimes selfish. And for the evil exemplar, participants read about John (Jonie) Thornton, an American rapist and serial killer, who murdered several young boys by strangling them.

**Immortality and religious belief.** Immortality was measured through Study 1's transcendence and trapped scales. As in Study 2, immortality items clustered into a transcendent (65% variance explained) factor and a trapped factor (17.24% variance explained) with no cross-loadings. Both scales were highly reliable ( $\alpha > .89$ ). As in the prior studies, religious belief was measured using the 10-item Supernatural Beliefs Scale (Jong et al., 2013).

**Analytic strategy.** Our analytic strategy was identical to Study 2. As in Study 2, intraclass correlation coefficients for the transcendence and trapped models were each robust (Wald  $Z$   $p < .001$ ), indicating that participant-level variance accounted for a 50% and 53% of variance in people's ratings of transcendent and trapped immortality, respectively.

#### Results

**Immortality across morality.** People rated evil targets as significantly more likely to live on in a trapped state



**Figure 3.** Perceived Immortality across Morality (Study 3). Fictional deceased good and evil exemplars were seen as more immortal than deceased nonmoral exemplars (Study 3). As in Study 2, good people have transcendent immortality whereas evil people have trapped immortality. Error bars represent standard errors. Means have been adjusted to control for target gender, and religious belief.

compared with neutral targets,  $b = 0.99$ ,  $SE = .11$ ,  $t(606) = 9.36$ ,  $p < .001$ ,  $f^2 = .07$ , 95% CI = [0.78, 1.19], whereas good targets were no more likely to live on in a trapped state compared with neutral targets,  $b = -0.13$ ,  $SE = .11$ ,  $t(606) = -1.22$ ,  $p = .22$ ,  $f^2 = .001$ , 95% CI = [-0.34, 0.08]. Conversely, people rated good targets as significantly more likely to live on in a transcendent state compared with neutral targets,  $b = 0.41$ ,  $SE = .10$ ,  $t(606) = 3.98$ ,  $p < .001$ ,  $f^2 = .01$ , 95% CI = [0.20, 0.61], whereas evil targets were rated as significantly less likely to live on in a transcendent state compared with neutral targets,  $b = -1.60$ ,  $SE = .10$ ,  $t(606) = -1.59$ ,  $p < .001$ ,  $f^2 = .18$ , 95% CI = [-1.80, -1.40]. Figure 3 displays the effects of morality on transcendent and trapped immortality.

**Immortality across exemplar gender.** Female and male targets were rated as similarly likely to live on in a transcendent state,  $b = 0.02$ ,  $SE = .13$ ,  $t(300) = 0.23$ ,  $p = .90$ ,  $f^2 < .001$ , 95% CI = [-0.25, 0.28], and a trapped state,  $b = 0.16$ ,  $SE = .12$ ,  $t(300) = 1.27$ ,  $p = .20$ ,  $f^2 = .002$ , 95% CI = [-0.09, 0.40].

**Immortality across religious belief.** Religious belief positively predicted people's ratings of trapped,  $b = 0.14$ ,  $SE = .03$ ,  $t(300) = 4.63$ ,  $p < .001$ ,  $f^2 = .05$ , 95% CI = [0.08, 0.20], and transcendent,  $b = 0.17$ ,  $SE = .03$ ,  $t(300) = 5.16$ ,  $p < .001$ ,  $f^2 = .04$ , 95% CI = [0.10, 0.24], immortality.

#### Discussion

Consistent with our hypotheses, people perceived good targets as having more transcendent immortality than evil and nonmoral targets, and evil targets as having more trapped immortality than good and nonmoral targets. These results replicate those of Study 2, but with fictional rather than historical exemplars.

## Study 4: From Kind of Immortality to Perceived Morality

Studies 2 and 3 revealed links between manipulations of morality and the kind of perceived immortality possessed by the deceased. Study 4 assessed the reverse causal direction: Would manipulations of the kind of immortality impact inferences about morality? We hypothesized that people would view transcendent souls as having been good living people and trapped souls as having been evil living people.

### Method

**Participants.** One hundred participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. Ninety-one participants (58 men, 33 women;  $M_{\text{age}} = 33.57$ ,  $SD_{\text{age}} = 11.54$ ) completed the study. In a within-subjects design, this sample size gave us 99% power to detect medium effect sizes ( $f^2 = .25$ ) and 95% power to detect small effect sizes ( $f^2 = .10$ ).

**Procedure.** Participants read two vignettes (in randomized order) that described two recently deceased individuals. In the transcendent condition, participants read about a person whose soul became spiritually transcendent after death (“John died recently. After death, John’s spirit left the earth and moved beyond space and time”). In the trapped condition, participants read about a person whose soul was spiritually trapped after death (“Michael died recently. After death, Michael’s spirit remained on earth in one particular location”).

After reading each vignette, participants were asked to rate the extent to which each target was a good person during their lifetime, and the extent to which they were an evil person. Unexpectedly, these ratings were only weakly inversely correlated ( $r_s > -.22$ ), so we refrained from collapsing this morality index, instead analyzing each rating separately. Religious belief was assessed as before.

**Analytic strategy.** Our analyses employed multilevel models predicting participants’ ratings of (a) good and (b) evil. These models contained 180 observations nested within 90 participants, with trapped versus transcendent ratings modeled as a Level 1 variable and participant religion modeled as a Level 2 variable. Intercepts were modeled as randomly varying across participants to account for the nested data structure. As in Studies 1 and 2, intraclass correlation coefficients for the transcendence and trapped models were each robust (Wald  $Zp < .001$ ), indicating that participant-level variance accounted for 8% and 38% of variance in people’s good and evil ratings, respectively.

### Results

**Morality across immortality.** As predicted, participants inferred that transcendent souls were significantly more good,  $b = 0.91$ ,  $SE = .15$ ,  $t(89) = 6.19$ ,  $p < .001$ ,  $f^2 = .20$ , 95% CI = [0.62,

1.20], and less evil,  $b = -0.70$ ,  $SE = .14$ ,  $t(89) = -4.94$ ,  $p < .001$ ,  $f^2 = .09$ , 95% CI = [-0.98, -0.42], than trapped souls.

**Morality across religious belief.** Religious belief was positively and significantly associated with seeing souls as evil,  $b = 0.09$ ,  $SE = .04$ ,  $t(89) = 2.42$ ,  $p = .01$ , 95% CI = [0.02, 0.18], but not as good,  $b = 0.04$ ,  $SE = .03$ ,  $t(89) = 1.24$ ,  $p = .22$ , 95% CI = [-0.01, 0.09].

### Discussion

Consistent with previous studies, perceptions of immortality were tied to those of morality. Even with no information about the lives of the deceased, people inferred that trapped souls were evil and transcendent souls were good. In Study 5, we extended these results to perceptions of the paranormal.

## Study 5: From Immortal to Paranormal

People’s descriptions of paranormal experiences usually involve spirits that continue to occupy the home they inhabited in life. Belief in these spirits is common across cultures, and from Aboriginal Australian house smoking to Haunted Houses across the United States, it is usually *malevolent* spirits that initiate paranormal contact. The preceding studies suggest a potential explanation for this assumption: Houses are concrete, circumscribed, and Earthly places, the kind of places where trapped (and hence malevolent) spirits might live. Studies 5 to 7 explore this possible mechanism, with Study 5 specifically testing whether people do indeed perceive paranormal experiences in houses to be with evil rather than good spirits.

### Method

**Participants.** One hundred fifty participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. One hundred forty-nine participants (81 men, 68 women;  $M_{\text{age}} = 33.65$ ,  $SD_{\text{age}} = 11.41$ ) completed the study. With three parameters, this sample had high power (94%) to detect small effect sizes ( $f^2 = .10$ ).

**Procedure.** Participants were asked to imagine themselves in the house of someone who recently died and were randomly assigned to one of two between-subjects conditions: *paranormal* and *control*. In the *paranormal* condition, participants read that, while in the house, they “feel the sensation of a supernatural presence, experience inexplicable feelings or emotions, have the sensation of not being alone, and feel a change in the atmosphere that cannot be logically explained. It is the spirit of the person who died there.” In the *control* condition, participants read that, while in the house, “an estate manager reads the individual’s last will and testament.” After reading each vignette, participants read the extent to which the person who died in the house was good or evil, on a scale from 1 (*extremely good*) to 7 (*extremely evil*).

**Analytic strategy.** We fit a multiple regression model predicting participants' ratings of good versus evil on the basis of their experimental condition and religious belief.

## Results

**Morality across paranormal experience and religious belief.** As predicted, people who paranormally detected a homeowner saw that homeowner as more evil ( $M = 4.27$ ,  $SD = 1.18$ ) than when they had no paranormal experience ( $M = 3.59$ ,  $SD = 1.30$ ),  $b = 0.68$ ,  $SE = .20$ ,  $t(2, 146) = 3.33$ ,  $p = .001$ ,  $f^2 = .07$ , 95% CI = [0.28, 1.08]. Religious belief was not significantly associated with ratings of evil,  $b = 0.02$ ,  $SE = .04$ ,  $t(2, 146) = 0.40$ ,  $p = .69$ ,  $f^2 = .001$ , 95% CI = [-0.06, 0.09].

## Discussion

When people detected spirits in physical locations, they tended to see these spirits as evil. However, locations vary considerably in levels of containment. If evil spirits are perceived as trapped and good souls are perceived as transcendent (as shown in Studies 2-4), then locations' level of containment may also influence how people interpret paranormal contact. We tested this idea in Study 6.

### Study 6: Confined and Expansive Spirits

In Study 5, people viewed paranormal spirits as more evil than spirits that did not assume a paranormal presence. As people perceive evil souls as more likely to persist as trapped, it is not surprising that they rated paranormal presences as malevolent when these presences existed within contained physical spaces. However, our previous findings would imply that people might attribute more positive qualities to paranormal presences in more expansive locations, such as deserts, mountains, and tundra. Of course, people may also perceive expansive locations as more positive, but we predicted that—even controlling for positivity—expansive locations would predispose people to paranormally detect more positive spirits than contained locations.

## Method

**Participants.** Two hundred ten participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. Two hundred seven participants (130 men, 77 women;  $M_{age} = 34.64$ ,  $SD_{age} = 12.16$ ) completed the study. As Study 6 had a similar design to Study 5, we used Study 5's effects size ( $f^2 = .07$ ) as a seed statistic for a power analysis, which confirmed that this sample was well-powered (91%) to detect significant effects.

**Procedure.** Each participant read two vignettes in which they detected a spirit in (a) a confined and (b) an expansive space.

Participants were specifically told, "You are in [a location]. Suddenly you feel a change in the atmosphere and sense that you are not alone. There is a spirit nearby, a spirit of someone who died not too long ago."

**Location pretesting.** To avoid confounding location confinement/expansiveness with positivity, we varied location positivity between subjects. In other words, participants either read about confined and expansive places of low positivity (narrow trench vs. hot dry desert), moderate positivity (underground cave vs. vast frozen tundra), or high positivity (tent in the woods vs. top of a tall mountain). Pilot testing ( $N = 76$ ) confirmed that the expansive locations in each condition were rated as more expansive than the contained locations ( $ps < .001$ ). It also suggested that the confined and expansive locations were not perceived as significantly different in the low-positivity condition ( $p = .08$ ), in the moderate-positivity condition ( $p > .99$ ), or in the high-positivity condition ( $p = .90$ ). Despite the marginal significance in the low-positivity condition, we note that the more expansive location (i.e., a hot dry desert) was rated as lower in positivity ( $M = 2.92$ ,  $SD = 1.94$ ) than the confined trench location ( $M = 3.30$ ,  $SD = 1.76$ ). Therefore, expansiveness was not confounded with positivity in any of our conditions.

**Morality.** After reading each vignette, participants read that "some spirits are from people who were good in life, some spirits are from people who were evil in life, and some spirits are from people who were neither in life," and then rated the extent to which they guessed the spirit was of someone evil, and separately, of someone good. These ratings were made on a scale of 1 (*not at all evil/good*) to 5 (*extremely evil/good*).

**Religious belief.** As in the prior studies, religious belief was measured using the 10-item Supernatural Beliefs Scale (Jong et al., 2013).

**Analytic strategy.** Our analyses employed a multilevel model predicting participants' ratings of targets' paranormal presence. These models contained 412 observations nested within 206 participants, with location expansiveness (expansive vs. confined) modeled as a Level 1 variable, and location positivity and participant religion modeled as Level 2 variables. As there was no theoretical basis for an interaction between location expansiveness and positivity, we did not include this interaction term in our model. Intercepts were modeled as randomly varying across participants to account for the nested data structure. As in the prior studies, the intraclass correlation coefficients was robust (Wald  $Z$   $ps < .001$ ) for evil, indicating that participant-level variance accounted for 61% of variance in participants' ratings. For goodness, however, participant-level variance did not account for any variance in participants' ratings. Nevertheless, multilevel modeling can still be important under such conditions (Hayes, 2006) and does not detract from the validity of results.



## Results

**Morality across location expansiveness.** Participants rated souls that they detected in expansive locations as more good,  $b = 0.26$ ,  $SE = .12$ ,  $t(408) = 3.07$ ,  $p = .04$ ,  $f^2 = .01$ , 95% CI = [0.02, 0.50], and less evil,  $b = -0.41$ ,  $SE = .08$ ,  $t(205) = -5.14$ ,  $p < .001$ ,  $f^2 = .03$ , 95% CI = [-0.57, -0.25], than souls that they detected in confined locations. These results suggest that participants' lay beliefs about good and evil souls in the afterlife shape their inferences about the morality of souls that they detect in different locations.

**Morality across location positivity.** Location positivity did not have a significant influence on how people rated the goodness,  $b = 0.02$ ,  $SE = .08$ ,  $t(408) = 0.32$ ,  $p = .75$ ,  $f^2 < .001$ , 95% CI = [-0.12, 0.17], and evilness,  $b = -0.05$ ,  $SE = .10$ ,  $t(203) = -0.52$ ,  $p = .61$ ,  $f^2 < .001$ , 95% CI = [-0.25, 0.14], of souls that they detected. This suggests that the distinction between transcendent and trapped immortality is not subsumed by valence. Although one might expect good spirits in paradise and evil spirits in perdition, much of this expectation may be due to the expansive nature of paradise and the confined nature of perdition.

**Morality across religious belief.** Religious belief was significantly associated with seeing souls as both significantly more good,  $b = 0.11$ ,  $SE = .02$ ,  $t(408) = 4.61$ ,  $p < .001$ ,  $f^2 = .05$ , 95% CI = [0.06, 0.16], and more evil,  $b = 0.08$ ,  $SE = .03$ ,  $t(203) = 2.46$ ,  $p = .02$ ,  $f^2 = .02$ , 95% CI = [0.02, 0.14]. This may be because religious belief correlated with seeing souls as more tangible, and therefore as more capable of possessing moral qualities. However, this inference goes beyond the scope of the current article.

## Discussion

Study 6 demonstrated that people's inferences about paranormal spirits depend on where these spirits reside, such that spirits in expansive places are seen as less evil than spirits in contained places. These results suggest why literature, film, and religious ritual ground the experience of malicious spirits in confined locations such as basements, caves, and dense woods. If encounters revolved around mountaintops or large deserts, people might expect kinder spirits.

## Study 7: Good Spirits in Haunted Houses

Our previous studies suggest that paranormal experiences in confined locations are suggestive of evil spirits because people perceive evil spirits as trapped. However, it is important to directly test the link between having trapped immortality and causing paranormal experiences. Not only would this show a direct link between the two forms of immortality and paranormal experiences, but it would also provide a broad framework for understanding cultural treatment of the paranormal.

In many paranormal accounts, it is evil spirits that are trapped on earth, but sometimes good spirits may also be trapped, whether because of unfinished business or cosmic accident. Likewise, evil spirits could hypothetically be permitted to leave the earth. Study 7 tested whether it was possible to reverse the findings of Study 5—in which a haunted house was attributed to more evil spirits. We predicted that explicitly stating that a good spirit was trapped and an evil spirit was transcendent would lead to inferences that a paranormal experience was caused by a good spirit.

## Method

**Participants.** One hundred twenty participants were recruited to complete the study for 50 cents on Amazon Mechanical Turk. One hundred six participants (58 men, 48 women,  $M_{age} = 32.20$ ,  $SD_{age} = 9.66$ ) completed the study. This sample was powered at 77% to detect small effect sizes ( $f^2 = .10$ ).

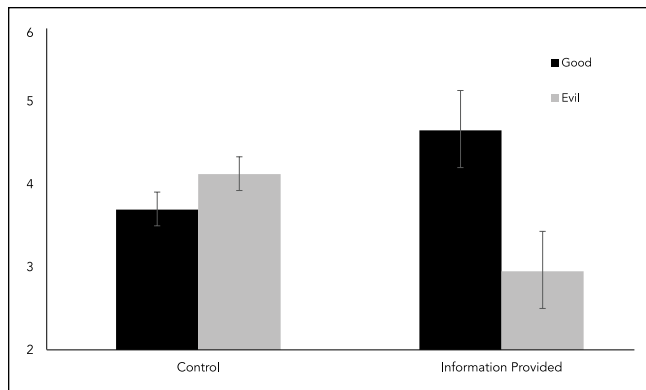
## Procedure

**Exemplars.** As in Study 3, participants read vignettes about fictional good or evil targets who had recently died. The vignettes read as follows: *Imagine an individual named (John/Kenneth) who recently passed away. (John/Kenneth) was a (good/evil)-natured person who (helped/killed) many people during his lifetime. He spent much of his time (raising money to cure childhood leukemia/stalking children before murdering them).*

Participants were randomly assigned to one of two between-subjects conditions. Participants in the control condition read the above vignettes without any additional information. In the "information about afterlife" condition, however, the good target's description was followed by the sentence, "After death, Kenneth's spirit remained trapped on earth in one, particular location," whereas the evil target's description was followed by the sentence, "After death, John's spirit left the earth and moved beyond space and time."

**Paranormal detection.** Our principle dependent variable concerned how easily participants could detect each spirit in a physical place. Participants were asked to imagine themselves in the room of each target, and rated the likelihood that they would experience: (1) *the sensation of a supernatural presence*, (2) *the feeling of not being alone*, (3) *a change in the atmosphere*, and (4) *the occurrence of inexplicable events*, on a 1 to 7 Likert-type scale. The scale showed high reliability ( $\alpha = .93$ ).

**Analytic strategy.** Our analyses employed a multilevel model predicting participants' ratings of targets' paranormal presence. These models contained 212 observations nested within 106 participants, with target morality (good vs. evil) modeled as a Level 1 variable, information condition and participant religion modeled as Level 2 variables, and the Information Condition  $\times$  Target Morality Variable modeled as a cross-level interaction term. Intercepts were modeled as randomly



**Figure 4.** Perceived Paranormal Detection across Conditions (Study 7). In the control condition, people saw evil souls as more likely than good souls to be detected in concrete places. However, when people were told that evil souls had transcended in the afterlife and good souls had remained trapped, this pattern reversed.

varying across participants to account for the nested data structure. As in the prior studies, the model's intraclass correlation coefficient was robust (Wald  $Z p < .001$ ), indicating that participant-level variance accounted for 67% of variance in people's ratings of paranormal presence.

## Results

**Paranormal detection across morality and soul type.** As predicted, participants' information condition interacted with target morality to predict ratings of paranormal detection,  $b = -1.06$ ,  $SE = .30$ ,  $t(104) = -3.51$ ,  $p < .001$ ,  $f^2 = .02$ , 95% CI =  $[-1.65, 0.47]$ . In the control condition, consistent with Study 6, evil targets had a higher rate of paranormal detection than good targets,  $b = -0.43$ ,  $SE = .21$ ,  $t(104) = -2.01$ ,  $p = .047$ , 95% CI =  $[-0.84, -0.01]$ . However, when participants were told that the evil target had become transcendent and the good target had become trapped in the afterlife, this pattern reversed, and good targets were seen as easier to detect than evil targets,  $b = 1.70$ ,  $SE = .48$ ,  $t(104) = 3.52$ ,  $p < .001$ , 95% CI =  $[0.75, 2.64]$ . This pattern is displayed in Figure 4.

## Discussion

This study found that, within a contained location (a room), people were more likely to experience the presence of an evil spirit than a good spirit. However, this effect reversed when participants were led to believe that good spirits persist as trapped in the afterlife and evil spirits persist as transcendent. This study suggests that people are only more likely to detect evil spirits in contained locations because of lay intuitions about the nature of evil spirits in the afterlife. When these lay intuitions are challenged, so too is the nature of paranormal experience.

## General Discussion

In seven studies, we found that (im)morality helps to confer immortality. Study 1 revealed a robust quadratic effect of morality on immortality, such that people viewed good and evil historical figures to live on more than nonmoral historical figures. Studies 2 and 3 demonstrated support for two different kinds of immortality, each tied to one end of the moral continuum. Evil people have trapped immortality (their souls are bound to one physical location) whereas good people have transcendent immortality (their souls live beyond space and time). Study 4 revealed that people make inferences from the kind of immortality possessed by the deceased to their morality in life—trapped immortal spirits must have been evil; transcendent immortal spirits must have been good.

Studies 5 to 7 examined perceptions of an important domain associated with immortality—the paranormal. Study 5 revealed that people link the felt presence of a spirit to the immortality of evil-doers. However, Study 6 found that this link between morality and the paranormal depends upon location. People perceive evil spirits in confined places (e.g., houses, dense woods), but perceive good spirits in expansive places (e.g., mountaintops, deserts). Study 7 demonstrated that good spirits can even be detected paranormally in the confined location of the house if they are described as being trapped.

## Implications

This research has several important theoretical and practical implications. First, it provides an empirical investigation into how perceived immortality is achieved. Despite the importance of death and the afterlife in people's lives, relatively few studies have examined these topics. Terror management theory (TMT; Greenberg et al., 1990; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989) has extensively investigated how people are affected by thoughts of their own literal death; yet, it largely centers on people's concepts of symbolic immortality—living on through contributions to one's culture (dying for one's country; Dechesne et al., 2003). By contrast, we focus on conceptions of literal immortality, showing that people can view literal immortality in different ways, and that some forms of literal immortality are more desirable than others.

This research may also hold implications for moral psychology, especially the study of moral character. Recent research reveals that people understand (im)morality not only through acts but also through moral character—perceived moral dispositions (Brambilla, Rusconi, Sacchi, & Cherubini, 2011; Goodwin, 2015; Pizarro & Tannenbaum, 2011; Uhlmann, Pizarro, & Diermeier, 2015)—which powerfully shape how others treat you (Goodwin et al., 2014). This research reveals that the influence of character

continues after death, and determines the form of immortality that you are granted by others.

Finally, this research informs the growing study of religious diversity in psychological science. In recent years, research has moved past religious universals such as belief in god(s), ritual, and magical causation, instead looking at the psychological and ecological predictors of plurality in this belief (see Norenzayan, 2016, for a review). Our studies contribute to this body of research by identifying plurality in how people see the afterlife, a concept that many previous studies have treated as a single construct (Jackson et al., 2018; Jong, Bluemke, & Halberstadt, 2012, but see Burris & Bailey, 2009; Burris & Sani, 2014).

### **Caveats**

Any set of studies comes with caveats and these studies are no exception. First, we recognize that these studies assessed folk theories about immortality, which are influenced by cultural artifacts. It is likely that our participants' different ascriptions of immortality to good and evil people are influenced by books, movies, and religious rituals. However, although cultural artifacts offer hints about lay theories, they do not tap them directly—or explain why they exist. In our investigations, we found support for some cultural assumptions (e.g., ghosts are evil), but revealed that these assumptions could be overturned (e.g., in expansive locations, ghosts are good) because of links between good/evil and transcendent/trapped immortality. Regardless of the link between lay theories and cultural artifacts, we suggest that lay theories are important to document because they powerfully influence behavior and social experiences (Gray, 2012).

Another limitation of the current studies is that links between morality and immortality were revealed in a very specific culture. As these studies were conducted in a Western, educated, industrialized, rich, and democratic country (WEIRD; Henrich, Heine, & Norenzayan, 2010), some afterlife beliefs—such as reincarnation—were likely underrepresented. However, the cross-cultural examples discussed in the introduction provide hints to our findings' generalizability. One specific potential criticism about conducting these studies in Western culture is the widespread idea of heaven and hell. Are our studies merely reflecting understandings of these specific ideas? We consider this possibility unlikely, as our studies controlled for participants' perceptions of heaven and hell, which is explicitly measured by the Supernatural Beliefs Scale. As a result, we argue that our studies not only capture intuitions that may have encouraged the cultural development of heaven and hell concepts but also transcend these cultural institutions.

### **Conclusion**

Despite the unknowable nature of what actually happens after death, humankind has always been interested in the

prospect of immortality. Although we do not claim to know whether literal immortality can actually be achieved, we have found at least one key to determining perceptions of psychological immortality. If, after death, you wish to transcend the Earth and live on in the afterlife beyond space and time, consider the path of righteousness. On the contrary, if you would rather maintain an Earthly presence, whether in a trench, a tent, or your family's own home, consider the path of evil.

## **Appendix**

### **Study 2: Exemplar Target Biographies**

#### *Immoral male*

Ted Bundy was one of the most notorious serial killers of recent history. He confessed to sexually assaulting and murdering 30 women in the 1970s, but he remains a suspect in many more unsolved homicides. He would often revisit his crime scenes multiple times to groom and sexually assault his victims' bodies. He lived most of his life in Salt Lake City, Utah. He died in 1989 at the age of 42.

#### *Immoral female*

Myra Hindley was a pedophile and serial killer who was named by the press as “the most evil woman in Britain.” She confessed to murdering five children and burying them in shallow graves. Autopsies revealed that she raped at least four of her young victims before killing them. She spent most of her life at her home in Manchester, England. She died of respiratory failure in 2002 at the age of 60.

#### *Nonmoral male*

Marcel Bich was a cofounder of Bic, the world's leading producer of ballpoint pens. In 1945, he and his business partner, Edouard Buffard, purchased an old factory outside of Paris and began producing disposable ballpoint pens. Although pens are the company's main product line, the Bic Corporation also produces disposable razors. He lived most of his life in Paris, France. He died in 1994 at the age of 79.

#### *Nonmoral female*

Estelle Page was an amateur golfer who won several tournaments held at the Pinehurst Resort in North Carolina. She played basketball and tennis in high school, and did not pick up golf until after she graduated from college in 1928. She spent most of her life at her home in Chapel Hill, North Carolina. She died of cardiovascular disease in 1983 at the age of 76.

#### *Moral male*

Martin Luther King Jr., was an influential activist who played a pivotal role in the Civil Rights Movement. He used nonviolent

protests, sit-ins, and marches to effectively resist racial inequality in America. A formidable orator, he gave some of the most memorable speeches in American history. He lived most of his life in Atlanta, Georgia. He died in 1968 at the age of 39.

### Moral female

Mother Teresa was the founder of an organization that provides countless services for individuals in need. She was recognized with the Nobel Peace Prize in 1979 for her contributions to the world. Her lifelong devotion to the care of the poor, the sick, and the disadvantaged is one of the highest examples of service to humanity. She spent most of her life at her home in Calcutta, India. She died of heart failure in 1997 at the age of 87.

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### Supplemental Material

Supplementary material is available online with this article.

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