Towards a psychology of religion and the environment:

The good, the bad, and the mechanisms

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Abstract

What is the relationship between religion and care for the natural world? Although this question has motivated research for decades, the evidence is inconsistent. Here, we highlight the psychological mechanisms by which specific features of religious systems may differentially impact environmental beliefs and commitments—positively and negatively—to help generate more targeted questions for future research. Religious traditions that emphasize human dominance over the natural world, promote just-world and end-world beliefs, and are tied to more fundamentalist/conservative attitudes can diminish levels of environmental concern in its adherents. Alternatively, religious and spiritual traditions that moralize the protection of the natural world, sanctify nature, and emphasize belief in human stewardship of the natural world can promote pro-environmental concern and commitments.

Keywords
Religion; Environmental concerns; Sustainability, Climate Change, Religious belief
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1.0 Introduction

Climate change is rapidly destroying the habitability of the environment, threatening entire ecosystems and the lives of eight billion people. The vast majority of the world’s population is religiously affiliated and predictions estimate that over the coming decades the growth of religiously affiliated populations will continue to outpace the unaffiliated [1]. With so much at risk, and so much up to human action, it raises an important question: can religion - an important guide to individual’s moral beliefs and behaviours - be used to promote environmentalism and inspire real climate change action? Surprisingly, the religious foundations for protecting the environment are relatively understudied in the psychological sciences, compared to longstanding interest in other fields (e.g., religious studies/theology [2], anthropology [3], conservation sciences [4], ecology [5]). Complicating matters, some aspects of religion have been shown to diminish environmentalism in some contexts, and promote a positive effect of religious environmentalism in others. Here, we examine and untangle the body of psychological evidence - the good, the bad, and everything between—to reveal how religion affects environmentalism, and the psychological factors that could underlie a religious impetus towards climate action [6].

2.0 The bad news

On the surface, there are reasons to suspect “religion” can diminish pro-environmental attitudes. In the United States in particular, this especially fits into a certain stereotype of the Christian right, that they are more likely to be conservative, anti-science, and climate deniers, and there is some evidence that supports this. For example, in the U.S. environmental concern has been shown to be lower across many religious indicators in
predominantly Christian samples, including self-reported religiosity [7], religious commitment [8,9], and frequent church attendance [10–15]. And, representative surveys of Americans consistently find that religious people, and particularly Christians, are less likely to believe in anthropogenic climate change or care about its consequences [16,17]. However, these negative effects are often small, and are better qualified by specific religious attitudes or other beliefs that may more directly diminish concern for the environment. Here we discuss how religiously supported dominion beliefs, religious fundamentalism, and just-world and end-world beliefs can diminish concerns for the environment in religious individuals.

2.1 Dominion beliefs.

A straightforward reason that religion can diminish environmentalism is that anti-environmental attitudes are explicitly woven into (some) belief systems [18]. *Dominion* beliefs represent a theological perspective that explicitly advocates human dominance over nature, as a divine right [19]. Such ideas are particularly emphasized in a number of Judeo-Christian religious texts, e.g., “and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth” [Genesis 1:28]. These scriptures can be interpreted to suggest that human dominance over nature is not just absolute, but morally absolute. There has been some evidence to support this, particularly in U.S. studies [11,12,19]. Christians are more likely to have a mastery perspective over nature, which contributes to lower concern for the environment [11,12]. In the U.S., religious people are more likely to hold dominion beliefs than non-religious people [20], and indeed, among religious people, those who support explicit dominion attitudes show less concern about climate change and environmental issues [19].

2.2 Fundamentalist and dogmatic thinking styles.
One factor frequently implicated in the negative effects of religion on environmentalism is Religious Fundamentalism [9,21]. Fundamentalist thinking typically invokes more orthodox beliefs and a more stern image of God—factors that are both negatively related to environmental concern [10,11,22,23]. Having an authoritarian vs. benevolent view of God is related to lower valuation of nature, and fewer sustainable behaviours [24]. Thus, one prediction might be that more fundamentalist groups with anti-environment sentiments woven into their belief systems will be even less concerned about environmental issues than less fundamentalist groups of the same religion. Alternatively, fundamentalism (regardless of specific belief content) may constrain environmentalism because of the underlying cognitive rigidity in thinking styles that are typical of fundamentalist thinking. Religious Fundamentalism is characterized by its dogmatic approach to belief, characterized by rigidness in thinking, hostility to new ideas, and resistance to rapid change [25]—all of which run counter to accepting the reality and morality of human-caused climate change. Climate change denial is particularly high among those Christians who ascribe to Biblical literalism [9,11,26], for example, that the Bible is the inerrant word of God. Religious Fundamentalism plays an important role in predicting religious anti-environmentalism—better than general religiosity—but importantly, this effect is predicted by Right-wing authoritarianism [27], indicating the key role of rigid thinking style. American Evangelical groups, the most fundamentalist Christian denominations, exhibit the lowest levels of environmental concern compared to other religious denominations and non-religious Americans [8,17]. It is worth noting, however that this basic result does not hold up in at least one other Evangelical group (i.e., Brazilian Evangelicals [28]). But again, this is predicted by dogmatic and rigid thinking styles. American Evangelical Protestants are more skeptical of both evolution and climate change,
not because these ideas are related, but reflective of greater anti-science attitudes and dogmatic thinking styles [29].

2.3 Just-world and end-world beliefs

Religious beliefs can also indirectly affect environmental attitudes, by emotionally protecting believers from the existential threats posed by destruction of the environment. For example, a belief in a just world [30] — the pervasive worldview that systems are fair, good will triumph over evil, and people ultimately get what they deserve. Religious people hold stronger beliefs in a just world [31], and so may be more resistant to the idea of deadly climate change that is so clearly unjust. When dealing with negative information or stressors, religious belief provides an emotional insulation, making stressors easier to cope with. Religious meaning can reduce concern with environmental threats since meaning helps people cope with distressing stimuli [20]. Insulation against the threat of climate change can also occur through end-world beliefs [9,11,12] — i.e., that humans are facing a prophesized Apocalypse. In conservative Christian traditions, the apocalypse involves a rapture of the righteous good, who will be saved and rewarded with eternal life. End-times belief can reduce care for the environment because it is no longer important to save the environment. And indeed, conservative eschatology is the strongest religious predictor of environmental perspectives, compared with religious tradition, and measures of religious commitment [9].

3.0 The good news

As reviewed, much of the psychologically minded literature in this domain has focused on Judeo-Christian traditions, and American Christians in particular. But cross-culturally, religious traditions around the world doctrinally support concern for and behavioral commitments to protecting the natural world [32] and religious leaders/communities have
publicly cooperated with secular groups like the United Nations to progress religious involvement in sustainable development [33,34]. Moreover, recent cross-national analyses employing data from the World Value Survey indicate a small but positive association between religiosity and environmental concern [35]. However, to understand the specific contributions of religion to environmental concern requires deeper consideration of religious systems - their specific beliefs and practices - in the specific socio-ecological contexts in which they arise [36]. Modern pro-environmental movements, for example, have much to gain from insight into the psychologically potent processes at play that have sustained religion’s involvement in environmental protection throughout human cultural history. We highlight three potential mechanisms: stewardship beliefs; spirituality and the role of purity/sanctity; and beliefs in supernatural punishment to promote cooperative resource management.

3.1 Stewardship and Spirituality

One way that religions can promote environmental concern is by explicitly moralizing concern for the natural world. For example, the philosophy of stewardship — that God has trusted humans with the duty of caring for nature — is also supported in religious scripture, and provides an important counter to dominion views, e.g., “When you lay siege to a city for a long time, fighting against it to capture it, do not destroy its trees by putting an axe to them, because you can eat their fruit. Do not cut them down. Are the trees of the field people, that you should besiege them?” Deuteronomy 20:19). Analysing data from the GSS survey, support for stewardship beliefs have a significant positive effect on political environmental activism [15]. Stewardship beliefs also promote environmental concern in American (mostly Christian) samples [19]; and in British and Turkish Muslims [37]. Moral concern for the environment is also related to individual differences in spirituality. Spirituality is associated with compassionate moral concerns for others [38] — moral concerns that can be applied
towards nature and the environment. And indeed, individual differences in spirituality predict concern for the environment through greater trait compassion in spiritual people [27].

Spiritual people report feeling more connected to nature [39,40] and an enhanced appreciation for the natural world [41]. Some evidence suggests that spiritual practices like mindfulness meditation are also associated more recycling and buying sustainable food [42,43], indicating that the feelings of connection to the divine can increase moral concerns and care for nature.

3.2 Purity and the environment

Purity concepts are an integral part of religious practice and belief [44], and may also impact concerns for the environment, especially where it concerns health and pollution [45]. Purity concerns in religion may foster environmental concern through consecration of nature as sacred — and so in need of protection from elements that may taint its purity [46]. However, the potency of “sanctity” may vary considerably in different contexts. For example, the Ganges river is both one of the most sacred waterways in the world and the most polluted — as beliefs about the rivers sacredness ironically seem to constrain concerns that the river can be harmed by human action/pollution [47]. That said, sacred environments have had numerous positive ecological benefits. In India, for example, tree biodiversity is better conserved in sacred groves than secular protected forests [48]; and species of freshwater fish disappearing in other regions, thrive in temple grounds [49]. The religious hunting taboos of the Mro in Bangladesh have contributed to the preservation of several species of fauna [50]. The fish populations of heavily fished Lake Tanganyika in Tanzania are regulated by local ritual practices [51]. As an example of unintended consequences of religion, Polish bird populations are most diverse near churches (they make for good nesting grounds) - and diversity is positively correlated with the age of the church [52].

3.3. Supernatural punishment & natural resource management
Supernatural punishment monitoring/punishment beliefs can help mitigate some of the cooperative problems associated with natural resource management (i.e., the tragedy of the commons, [53]). In an analysis of 48 ethnographic case studies of communities distributed around the world, Cox and colleagues [54] provide evidence that religions are actively implicated in governing access to important natural resources (e.g., by restricting and appropriating access to certain people at certain times, often marked by religious rituals; and delineating protected, and often sacred, from non-protected areas with religious landmarks).

Strikingly, their analyses reveal the prevalence of beliefs in supernatural punishment, that norm violators will be sanctioned by supernatural agents in the form of disease, misfortune and even death (see also [55]). Given their methods, however, this analysis can only hint at both the underlying psychological processes at play in sustaining cooperation in face of collective action problems and, importantly, the effectiveness of religious governance of actually regulating or protecting the environment. But that being said, it highlights that natural resource management has been a focal cooperative problem faced by every human society. This work provides some compelling evidence that similar religious solutions (e.g., beliefs regarding supernatural norm enforcement) have emerged in diverse cultural settings to sustain cooperation in the domain of natural resource management.

Importantly, this cross-cultural evidence seems at odds with the evidence reported earlier for a negative relationship between belief in an authoritarian God and environmental concern observed in the United States, for example. But taken together, this might suggest that beliefs about whether or not gods care about or concern themselves with environmental behaviours may moderate the relationship between beliefs in authoritarian supernatural agents and environmental concern [36,56,57].

**4.0 Summary**
The climate crisis is a moral issue, and here we have reviewed ways in which religion can both promote and constrain concern for environmental issues. Where religion diminishes environmental concerns it tends to be through stronger dominance and indifference towards nature, e.g., just-world and end-world beliefs, dominion beliefs and dogmatic thought. But, religion can promote environmental concerns through greater moral concerns for protection, through values of sacredness, spirituality, and stewardship. And cross-cultural evidence suggests a largely positive effect of religion on environmental values. Religion thus has the unique capacity to construct moral frameworks that can encourage human beings to protect the Earth [58]. When anti-environmental attitudes are backed by the conviction of religious beliefs, it can be dangerous indeed. But when those same convictions are applied towards protection, it can inspire action and cooperation towards a greater good.
Authors [6] review research on seven bases of human cooperation (Family, Group, Reciprocity, Heroism, Deference, Fairness, and Property) for potential to motivate cooperative conservation efforts. Most work has focused on reciprocity to study environmental cooperative action, but authors suggest that conservation researchers and policymakers should make use of all strategies to develop more comprehensive and systematic strategies.


https://www.pewforum.org/2009/04/16/religious-groups-views-on-global-warming/


Authors [19] explore whether differences in stewardship vs. dominion beliefs supported by religious authorities can affect religious individuals’ views on the environment and climate change. Correlational evidence finds that stewardship beliefs (that humans have a religious duty to protect nature) predict more favorable attitudes towards the environment, whereas dominion views (that humans have God-given dominance over nature). Experimental studies show that stewardship messages credited to the Bible or the Pope enhance environmental concerns and intentions for religious people.


Authors [20] test a novel theory that religious meaning actually reduces concern for climate change because that meaning helps people cope with distressing stimuli. Structural equation modelling on data from the 2016 General Social Survey shows Americans who are more religious experience diminished sense of danger from environmental threats, yet exhibit heightened general environmental interest.


Although some literature suggests Evangelical Christians less concerned about environmental issues, authors provide evidence that this is not the case in Brazilian Evangelicals. Authors use data from fieldwork, national surveys, and a survey experiment to find that evangelical affiliation in Brazil is not associated with less environmental concern. Moreover being primed to consider divine intervention increased support for environmental protection in Evangelicals.


The author [57] reviews longitudinal data from Gallup’s annual surveys on the environment for evidence that (American) Christians have increased environmental concern over time. But Gallup data do not support this “greening of Christianity” and in across many measures, Christians tend to show less concern about the environment.
