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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; moral concern; environmentalism

38 **How religious beliefs and practices affect environmentalism:**

39 **Bad news and good news**

40 **1.0 Introduction**

41 Climate change is rapidly destroying the habitability of the environment, threatening
42 entire ecosystems and the lives of eight billion people. The vast majority of the world's
43 population is religiously affiliated and predictions estimate that over the coming decades the
44 growth of religiously affiliated populations will continue to outpace the unaffiliated [1].
45 With so much at risk, and so much up to human action, it raises an important question: can
46 religion - an important guide to individual's moral beliefs and behaviours - be used to
47 promote environmentalism and inspire real climate change action?

48 Surprisingly, the religious foundations for protecting the environment are relatively
49 understudied in the psychological sciences, compared to longstanding interest in other fields
50 (e.g., religious studies/theology [2], anthropology [3], conservation sciences [4], ecology [5]).
51 Complicating matters, some aspects of religion have been shown to diminish
52 environmentalism in some contexts, and promote a positive effect of religious
53 environmentalism in others. Here, we examine and untangle the body of psychological
54 evidence - the good, the bad, and the complicated—to reveal how religion affects
55 environmentalism, and the psychological factors that could underlie a religious impetus
56 towards climate action [6].

57 **2.0 The bad news**

58 On the surface, there are reasons to suspect “religion” can diminish pro-
59 environmental attitudes. In the United States in particular, this especially fits into a certain
60 stereotype of the Christian right, that they are more likely to be conservative, anti-science,
61 and climate deniers, and there is some evidence that supports this. For example, in the U.S.
62 environmental concern has been shown to be lower across many religious indicators in

63 predominantly Christian samples, including self-reported religiosity [7], religious
64 commitment [8,9], and frequent church attendance [10–15]. And, representative surveys of
65 Americans consistently find that religious people, and particularly Christians, are less likely
66 to believe in anthropogenic climate change or care about its consequences [16,17]. However,
67 these negative effects are often small, and are better qualified by specific religious attitudes
68 or other beliefs that may more directly diminish concern for the environment. Here we
69 discuss how religiously supported dominion beliefs, religious fundamentalism, and just-world
70 and end-world beliefs can diminish concerns for the environment in religious individuals.

71 *2.1 Dominion beliefs.*

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

86 *2.2 Fundamentalist and dogmatic thinking styles.*

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

111 not because these ideas are related, but reflective of greater anti-science attitudes and
112 dogmatic thinking styles [29].

113

114 2.3 *Just-world and end-world beliefs*

115 Religious beliefs can also indirectly affect environmental attitudes, by emotionally
116 protecting believers from the existential threats posed by destruction of the environment. For
117 example, a belief in a *just world* [30] — the pervasive worldview that systems are fair, good
118 will triumph over evil, and people ultimately get what they deserve. Religious people hold
119 stronger beliefs in a just world [31], and so may be more resistant to the idea of deadly
120 climate change that is so clearly unjust. When dealing with negative information or stressors,
121 religious belief provides an emotional insulation, making stressors easier to cope with.

122 Religious meaning can reduce concern with environmental threats since meaning helps
123 people cope with distressing stimuli [20]. Insulation against the threat of climate change can
124 also occur through *end-world beliefs* [9,11,12] — i.e., that humans are facing a prophesized
125 Apocalypse. In conservative Christian traditions, the apocalypse involves a rapture of the
126 righteous good, who will be saved and rewarded with eternal life. End-times belief can
127 reduce care for the environment because it is no longer *important* to save the environment.
128 And indeed, conservative eschatology is the strongest religious predictor of environmental
129 perspectives, compared with religious tradition, and measures of religious commitment [9].

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131 **3.0 The good news**

132 As reviewed, much of the psychologically minded literature in this domain has focused on
133 Judeo-Christian traditions, and American Christians in particular. But cross-culturally,
134 religious traditions around the world doctrinally support concern for and behavioral
135 commitments to protecting the natural world [32] and religious leaders/communities have

136 publicly cooperated with secular groups like the United Nations to progress religious
137 involvement in sustainable development [33,34]. Moreover, recent cross-national analyses
138 employing data from the World Value Survey indicate a small but *positive* association
139 between religiosity and environmental concern [35]. However, to understand the specific
140 contributions of religion to environmental concern requires deeper consideration of religious
141 systems - their specific beliefs and practices - in the specific socio-ecological contexts in
142 which they arise [36]. Modern pro-environmental movements, for example, have much to
143 gain from insight into the psychologically potent processes at play that have sustained
144 religion's involvement in environmental protection throughout human cultural history. We
145 highlight three potential mechanisms: stewardship beliefs; spirituality and the role of
146 purity/sanctity; and beliefs in supernatural punishment to promote cooperative resource
147 management.

148 *3.1 Stewardship and Spirituality*

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

161 towards nature and the environment. And indeed, individual differences in spirituality predict
162 concern for the environment through greater trait compassion in spiritual people [27].
163 Spiritual people report feeling more connected to nature [39,40] and an enhanced
164 appreciation for the natural world [41]. Some evidence suggests that spiritual practices like
165 mindfulness meditation are also associated more recycling and buying sustainable food
166 [42,43], indicating that the feelings of connection to the divine can increase moral concerns
167 and care for nature.

168 *3.2 Purity and the environment*

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

185 *3.3. Supernatural punishment & natural resource management*

186 Supernatural punishment monitoring/punishment beliefs can help mitigate some of
187 the cooperative problems associated with natural resource management (i.e., the tragedy of
188 the commons, [53]). In an analysis of 48 ethnographic case studies of communities
189 distributed around the world, Cox and colleagues [54] provide evidence that religions are
190 actively implicated in governing access to important natural resources (e.g., by restricting and
191 appropriating access to certain people at certain times, often marked by religious rituals; and
192 delineating protected, and often sacred, from non-protected areas with religious landmarks).
193 Strikingly, their analyses reveal the prevalence of beliefs in supernatural punishment, that
194 norm violators will be sanctioned by supernatural agents in the form of disease, misfortune
195 and even death (see also [55]). Given their methods, however, this analysis can only hint at
196 both the underlying psychological processes at play in sustaining cooperation in face of
197 collective action problems and, importantly, the effectiveness of religious governance of
198 actually regulating or protecting the environment. But that being said, it highlights that
199 natural resource management has been a focal cooperative problem faced by every human
200 society. This work provides some compelling evidence that similar religious solutions (e.g.,
201 beliefs regarding supernatural norm enforcement) have emerged in diverse cultural settings to
202 sustain cooperation in the domain of natural resource management.

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

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210 **4.0 Summary**

211 The climate crisis is a moral issue, and here we have reviewed ways in which religion
212 can both promote and constrain concern for environmental issues. Where religion diminishes
213 environmental concerns it tends to be through stronger dominance and indifference towards
214 nature, e.g., just-world and end-world beliefs, dominion beliefs and fundamentalist thought.
215 But, religion can promote environmental concerns through greater moral concerns for
216 protection, through values of sacredness, spirituality, and stewardship. And cross-cultural
217 evidence suggests a largely positive effect of religion on environmental values. Religion thus
218 has the unique capacity to construct moral frameworks that can encourage human beings to
219 protect the Earth [58]. When anti-environmental attitudes are backed by the conviction of
220 religious beliefs, it can be dangerous indeed. But when those same convictions are applied
221 towards protection, it can inspire action and cooperation towards a greater good.

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