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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; Environmental concerns; Sustainability, Climate Change, Religious belief

36 **Towards a psychology of religion and the environment:**

37 **The good, the bad, and the mechanisms**

38 **1.0 Introduction**

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

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

55 **2.0 The bad news**

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

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

69 *2.1 Dominion beliefs.*

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

84 *2.2 Fundamentalist and dogmatic thinking styles.*

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

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

111

112 2.3 *Just-world and end-world beliefs*

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

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

128

129 **3.0 The good news**

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

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

146 *3.1 Stewardship and Spirituality*

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

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

166 *3.2 Purity and the environment*

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

183 *3.3. Supernatural punishment & natural resource management*

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

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

207

208 **4.0 Summary**

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

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 286 duty to protect nature) predict more favorable attitudes towards the environment, whereas
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