

Religious Factors and Environmental Behaviour: A Review of the Professional Literature

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A comprehensive review of literature on environmental behaviour indicates varying and often opposing hypotheses of relationships between such behaviour and religious factors such as religion itself, religious institutions, and religious figures. Analyzing the previous studies on the hypothesised religious factors suggest a mixed results. Some authors believe that religions do not have a significant relationship with environmental behaviour. Others suggest that religions certainly have a positive relationship with the environment, but, as far as environmental behaviour is concerned, the misinterpretation of religious texts and teachings, and the distancing of oneself from one's religion cause negative environmental behaviour. Analysis of the previous empirical studies on the issues found that religious factors have a negative relationship with environmental behaviour. However, those empirical findings are not without limitations.

INTRODUCTION

This article discusses the literature on the issues of the relationship between religious factors and environmental behaviour. A comprehensive review of literature on environmental behaviour indicates varying hypotheses of relationships between religious factors and environmental behaviour. This article contributes to the existing literature by providing a review of the theoretical foundations and empirical evidence for the hypotheses relating religious factors and environmental behaviour.

Generally researchers have been consistent in noting the various factors that drive people to adopt environmentally ethical behaviour (Buttel, 1987). Behaviour is a function of both personal and situational characteristics (Mainieri et. al., 1997). Thus, environmentally ethical behaviour can be influenced by either one or both characteristics. And as far as religious factors are concerned, such factors exist in both form of characteristics – personal such as religious conscience, and situational such as religious institutions and religious figures.

A search on the literature found few studies that used religions, religious institutions or religious figures as their theoretical foundations to

explain the specific environmentally ethical behaviour. A few other studies like a study by Hand and Van Liere (1984) used a combination of White's (1973) model, a denominational diversity model, and a 'no difference' model while Wiegel (1977) used attitude-behaviour theory. Most of the studies on religions, religious institutions and religious figures in association with the environment were approached at the theoretical level. However, some studies such as by Fowler (2003) and Letcher (2003) used qualitative method, in particular, participation and observation techniques in their approach. There have also been a few empirical studies using quantitative method (Hand and Van Liere, 1984; and Wiegel, 1977).

RELATIONSHIP BETWEEN RELIGIOUS FACTORS AND ENVIRONMENTAL BEHAVIOUR

Some authors (e.g., Kalland, 2002; and White, 1973) assert that some religions have no relation with environmentally ethical behaviour and go on to suggest that some religions actually encourage humans towards environmental destruction. While authors such as Moncrief (1973) believes that religions, in particular Judeo-Christian, has very little indirect influence on human negative environmental behaviour many others (e.g., Azizan, 1992; Bryer, 1999; Dwevedi, 1990; Fowler, 2003; Letcher, 2003; Mawil, 1990; Nasr, 1990; Vesilind and Gunn, 1999; Wilber, 1998; Zaini Ujang, 1993a, and Zaini Ujang 1993b) believe that it is the interpretation of religions that causes environmental behaviour to be positive or negative towards the environment. These authors believe that the sacred texts and teachings of the prophets and founders of religions are totally innocent of negative attitudes or behaviours towards the environment.

Negative or No Significant Relationship

White (1973) argued that religion strongly influences what people do to their environment, and Christianity (particularly in the West) has been a bad influence on the relationship between humans and the environment. An empirical study on citizens of New England by Wiegel (1977), for example, provides some support for White's thesis. Wiegel (1977) found that environmental participants were more liberal in their religious philosophies (measured by the degree of involvement in religious teachings and prayer and belief in the infallibility of the Bible). In addition, Hand and Van Liere (1984) have studied a random sample of the population of Washington State using mail survey and found that non-Christians (those who responded 'none'; 'belief in God, no religion'; 'agnostic',

and 'atheist') were more supportive of pollution control, population control and conservation. The least supportive were Baptists, Mormons and conservative Christian sects. The author also found that the greater the frequency of church attendance the less environmentally concern (and the stronger mastery-over-nature) viewpoint found among the Baptists, Mormons and conservative Christian sects. However, among the more liberal denominations such as Episcopalians and Lutherans, the higher the church attendance the greater their environmental concern. The findings of empirical studies by Hand and Van Liere (1984) and Weigel (1977), then suggest some support for White's thesis. But the question remains: do these results suggest that it is the religion or the interpretation of the religion that is at fault? In addition, the results are more supportive of the denominational diversity model which takes account of denominational differences than White's model (i.e., non-Judeo-Christians have greater concern for the environment).

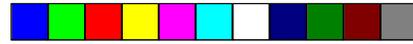
White (1973) personally doubted that environmental problems can be avoided simply by more science and more technology. He believed that a new religion or a new thought of old ones are needed. He believed that human ecology is deeply conditioned by beliefs (religions) about our nature and destiny, and being a historian himself, gave historical evidence for his claim, in particular, on the influence of Christianity. He claimed that people in the West continue to live today as they have lived for about 1700 years, "very largely in the context of Christian axioms" (1973, p. 24) that nature has no reason for existence except to serve humans. He stated that in the Christianity story of creation "Man named all the animals, thus establishing his dominance over them" (White, 1973, p. 25). All non-human creations are to serve human's purposes. And although human's body is made of clay, human is not simply part of nature but is made in God's image. Christianity not only established a dualism of human and nature but also insisted that it is God's will that human exploit nature for his proper ends. He argued "The fact the most people do not think of these attitudes as Christian is irrelevant. No new set of basic values has been accepted in our society to displace those of Christianity" (White, 1973, p.29). He claimed that "Both our present science and our present technology are so tinged with orthodox Christian arrogance toward nature" (White, 1973, p. 29-30).

According to White (1973), even the greatest spiritual revolutionist in Western history, St. Francis, failed to promote an alternative Christian view of human relation to nature – to substitute the idea of man's limitless rule of creation with the idea of the equality of all creatures, including human. He claims "by destroying¹ pagan animism² Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects" (White, 1973, p. 25). But the author admits that the interpretations of Christianity's view

by Christians on human relations with nature are different in different contexts. The negative interpretations of Christianity's view on human relations with the environment may apply to the medieval West but not to Greeks and Latins who have different "tonality of piety and thought" (White, 1973, p. 26). According to White (1973) "The Greeks believed that sin was intellectual blindness, and that situation was found in illumination, orthodoxy – that is clear thinking. The Latins ... felt that sin was moral evil, and that salvation was to be found in right conduct" (p. 26). However, Hoge (____) argued that Judeo-Christians have not destructed the environment any more than other people. He argued that the Greeks who cleared off forests to get timber and the Egyptians who totally changed the Nile Valley from swampland to high-intensity cropland were not influenced by Judeo-Christian teachings.

Like White (1973) who argued that environmental crisis today has risen from the dualism and anthropocentrism rooted in Christianity, Kalland (2002) argued that Native American and Asian religions too have features that facilitate serious degradation of the environment. The author also refuted the attribution of environmental problems to modernization and westernization as far too simplistic. Indeed, she sees worldviews and cosmologies as full of contradictions not coherent constructions, and that "Reading ecological insight from religious texts tends to be based on selective reading of these texts, ignoring evidence to the contrary" (Kalland 2002, p. 147). Thus, to prove her claim that religions in Asia facilitate environmental degradation no less than Judeo-Christian tradition, modernization and westernization, she presented the contrary evidence (from the popular beliefs of Buddhism, Zen and Shinto taking the case of Japan) that according to her has been ignored. According to Kalland (2002), a study of the holistic approach to nature held by the Japanese (in particular) raises a few points of concern as to how useful such worldview for the protection of the environment can be. Admitting that her reading is equally selective, Kalland (2002) concluded that "the holistic approach, viewing nature as the totality of all things may legitimize pollution" (p. 155). Such a view blurs the "distinction between nature created by gods and artefacts created by people... Litter or a vending machine are just as much a part of nature as a crane or a pine tree" (p. 155). She also concluded that "viewing nature as a process [where everything decays and dies only to give birth to new lives in an endless cycle] may make its quantity unimportant" (p. 155) and the "enhancement and refinement of nature [e.g., a garden and *bonsai*] may imply reductions" (p. 155). She also concluded that "a divine nature [perspective by the Japanese in particular] may open for its appropriation and exploitation" (p. 155) as:

[h]uman beings are considered to become indebted to nature when exploiting it, but can "repay" harm that



has been inflicted upon nature, animate or inanimate, through, for instance, memorial rites... leaving the rest to nature itself to mend. A divine nature is, therefore, by no means a guarantee against environmental degradation, as has often been claimed (p. 155).

However, unlike White (1973), Kalland (2002) believes that the answers to environmental problems are not within religious context but within the social context giving the example of Japan as one of the industrial countries achieving the largest forest cover relative to her land area after periods of deforestation, and changing Tokyo from the most polluted major cities to one of the most cleanest. The author claimed that these achievements were accomplished not by “searching for religious clues but ... via painful experience, confrontation and political pressure” (Kalland, 2002, p. 155).

Moncrief (1973) agrees with White (1973) that “Human ecology is deeply conditioned by beliefs about our nature and destiny – that is, by religion” (p. 24) but rejected the claim that it is the primary conditioner of human behaviour towards the environment. Hoge (____) and Moncrief (1973) present an alternative set of hypotheses based on cultural variables as an explanation of the environmental crisis we face today. Moncrief (1973) argued, “The forces of democracy, technology, urbanization, increasing individual wealth, and aggressive attitude toward nature are directly related to environmental crisis” (p. 39). He admits that lack of personal moral direction contributes to bad behaviour towards the environment but like Kalland (2002), does not agree that it is restricted to any one religion or culture. He argued that it is almost a universal tendency to maximize self-interests and to shift production costs to society to promote individual ends. Moncrief (1973) agrees with White (1973) that “Judeo-Christian tradition has probably influenced the character of each of these forces [other factors than religions]” (p. 39-40) indirectly but disagrees with White (1973) that it is the “historical root of our ecological crisis” (p. 1) for lack of historical or scientific support. Thus, it is fair to say that Moncrief (1973) believes that other factors are more influential than religious ones on people’s environmental behaviour.

Positive Relationship and Misinterpretation

Other researchers like Fowler (2003) and Letcher (2003) see spiritual beliefs on the ideas of nature like Eco-pagan and indigenous religions as being a motivating factor for people to use non-violent direct action such as to protest construction projects that exploit the environment and to protect natural resources. Letcher (2003) believes that religions are the foundation that belief systems, thoughts,

institutions are based on and grow consciously or unconsciously. Fowler (2003) asserts that indigenous religions contain sentiments that encourage conservationist ethics and in some cases supports the goals of conservation biology. Fowler (2003) claims that qualitative evidence of her study on indigenous of Karendi in Sumba Indonesia and their religion (as in other indigenous communities in Southeast Asia) suggests that the notion of sacredness is linked to conservationist management techniques. According to Fowler (2003) the resource management techniques of the indigenous people “are shaped by the belief that they are responsible for taking care of inherited goods and items that were valuable to their ancestors” (p. 319).

Bryer (1999), Vesilind and Gun (1999) and Wilber (1998) see religions and religious texts as offering or providing a useful foundation for environmental ethical codes for human to strike a balance between human needs to utilise nature to survive and human responsibility as a steward of the earth. The interpretations of Torah and Talmud are the sources of *Halacha* (the Judaism’s system of behavioural rules) (Bryer, 1999), some interpretations of Bible are the source of stewardship (the ethical concept in Christianity), and interpretations of the Qur’an are the source of Syari’ah (Islamic law – among others concerning environmental protection). Bryer (1999), for instance, highlights an analysis by Chief Rabbi of Jerusalem on the chapter of Genesis (2:15⁴) on the verb ‘to till’ or ‘to dress’ which means to utilise nature and be productive, and the verb ‘to keep’ which means to avoid ecological damage. Vesilind and Gunn (1999) and Hoge (____) also highlights the first chapter of Genesis and the second chapter of Genesis in such manner, that is, not as a self-contradictory texts but as emphasising the balance between human needs and human responsibility towards nature.

The claim of religious texts being self-contradictory as claimed by Kalland (2002) is not new, nor is it restricted to the environment, rather it is as old as the religious texts themselves and addresses many issues. However, in this section only the claims on the subject of the environment are discussed. One can claim that the Qur’an also contains ‘self-contradictory’ texts on the subject of the environment. The Qur’an (17:70¹, 95:4²) says that humans are the highest of God’s creation and even commands the angels to bow down to Adam (the first human created) (Qur’an 2:34³). But in the Qur’an (6:165⁴, 2:30⁵, 3:72⁶, 75:14-15⁷) God also made human being a *khalifah* that comes with the responsibility so onerous and burdensome (Azizan, 1992) that no other creature would accept. In addition, human beings are also required to submit (Islam) to God and be His servants (Qur’an 7:32⁸, 51:56⁹). Thus, one could claim, for instance, that it is self-contradictory for the Qur’an to say human is created with the highest dignity and then demand from the human beings to carry such burden of responsibility (as *khalifah*). In addition, Qur’an (31:20¹⁰, 45:13¹⁵)

says God created the heaven and the earth and all that is in them from the sake of human beings. But Qur'an (40:57¹⁶) also points out that human is existing side by side with other creatures and that human life depends on those other creations in a system of which human is only a part, hence, several verses in the Qur'an (6:38¹⁷, 55:8-10¹⁸, 27:18-19¹⁹, 2:205²⁰, 54:28²¹) calls for environmental protection. One could also claim that the Qur'an is contradicting itself in saying the earth is created for the sake of human beings and then demanding that human beings protect it. In line with the Qur'an, the teaching of the Islamic scholar Imam Hasan (quoted in Sayyid Muhammad Rizni, 1994) for humans to engage in exploring the earth for wealth as if one would live forever, and at the same time urge one to engage as *khalifah* carrying several responsibilities, among others, of protecting the environment as if one would die tomorrow can be seen as a self contradictory teaching if one chooses to see it that way. But, one can also see those 'contradictions' as a way in which the religious texts provide humans with ethical codes for one to strike a balance between human needs behaviour in the effort to strike such balance. Even White (1973) admits that if St. Francis' approach (that is nature is important to God and to love God is to take care of His creations) toward nature had prevailed the Western environment would have been different.

Vesilind and Gunn (1999) affirm that people, not religions are the cause of environmental degradation because people tend to accept certain religious dogmas "when there is sufficient need for such beliefs and when there exist strong leaders who promote certain religious dogmas" (p. 85). Hoge (____) also noted that:

the mastery-over-nature view is associated with a literal interpretation of the Bible and an eschatological vision of history, while the stewardship-of-nature view is associated with a more scientifically-informed worldview, internationalism, and a longer view of history.

Thus, religious texts face a danger of misinterpretation, in particular of being interpreted in such a way as to support one's self-interest. However, as far as Judeo-Christian and Islamic tradition are concerned, those religions come not only with scriptures (as life manuals) but also prophets (as life teachers) to rightly interpret and demonstrate the scriptures in daily life (Qur'an 62:2¹⁸) in order to avoid the danger of misinterpretation and misbehaviour. Many scholars (e.g., Nasr 1990, Zaini Ujang 1993a, Zaini Ujang 1993b) believe that the practice of misinterpretation (deliberately or unconsciously) to justify misbehaviour (such as towards the environment) prevailed because people allowed it to do so by distancing themselves from their religious scriptures and their prophets' teaching.

Several authors (Azizan, 1992; Bryer, 1999; Dwevedi, 1990; Mawil, 1990; Nasr, 1990; Vesilind and Gunn, 1999; Wilber, 1998; Zaini Ujang, 1993a; and Zaini Ujang) agree that religions provide the environmental ethical codes for their followers to strike a balance between meeting their needs and responsibility towards the environment. But they also agree that a majority of followers of these religions, religious institutions and religious figures in the community do not fully utilise the remedies that already there in their religions to solve environmental problems we face today. For example, Wilber (1998) sees moral values as necessary counterparts in a system based on personal interest. But Wilber (1998) argued that religious value has diminished in modern society because of a twofold change:

First, the repudiation of the social character and responsibility of religion has meant its banishment to a purely private matter. Second, the elevation of self-interest as a praiseworthy virtue in turn has undermined that privatized religious ethic (p. 1604).

Wilber (1998) also asserts that moral values from religion that are inculcated by families, churches, governments, and schools are important in shaping behaviour. However, he thinks that the roles played by these institutions are insufficient. Nasr (1990) believes that the strictures and injunctions in the religions and cultures of the East were originally sympathetic towards nature but that the materialistic orientation of the West has affected the cultures of the East. He gives the example of environmental exploitations in India, Sri Lanka and Japan by their own people who belong to such sympathetic religions and cultures. Dwevedi (1990) believes that many world religions share the perspective that the abuse and exploitation of nature for immediate gain is unjust, immoral, and unethical. According to Dwevedi (1990) it is a historical fact that “Muslims, Hindus and Buddhists were careful to observe moral teachings regarding the treatment of nature; not only common people but also rulers and kings followed those ethical guidelines and tried to create an example for others, but sadly it remains historical” (p. 201).

Regardless of whether or not the religions, religious institutions, or religious figures are seen as posing a positive or a negative influence on human relations to their environment, most of the authors agree that religions, religious institutions or religious figures have a certain degree of influence on human environmental behaviours. More empirical studies on the degree of such influence would be very interesting to explore.

EMPIRICAL STUDIES AND THEIR LIMITATIONS

Not many studies have used quantitative method in explaining the relationship between religions and environmental behaviour. The reason is probably due to religions being seen as providing concerns towards nature generally but not in terms of specific behaviour. According to many studies (Huebner and Lipsey, 1981; Mainieri et. al., 1997; Oom Do Valle et. al., 2005; Shrum et. al., 1994; Thogersen, 2000; and Wall, 1995) general environmental attitudes or concerns do not highly correlated with specific environmentally ethical behaviour. Studies (Huebner and Lipsey, 1981; Mainieri et. al., 1997; Oom Do Valle et. al., 2005; and Shrum et. al., 1994) show that only specific environmental attitudes or concerns are highly correlated with specific environmentally ethical behaviour.

In addition, the empirical studies on the relationship between religions and environmental behaviour when they are conducted failed to “look at both general and specific environmental attitudes, and... people’s attitude toward Biblical teachings while controlling other possible sources of bias” (Hoge, _____, p. 4-5). Hoge (_____) analyzed a few empirical studies (Hand and Van Liere, 1984; Shaiko, 1987; and Weigel, 1977) and found that they generally support White’s (1973) thesis, but he also found that those studies were not without limitations, in particular, the limitation in the coverage of type of respondents. The studies failed to “compare Christians from diverse denominations, [with non-Christians such as] Jews, Muslims, Hindus, Buddhists, devotees of tribal religions such as those of American Indians, and secularists” (Hoge, _____, p. 4). Thus, the results of the studies have a limited generalisability power. Hoge (_____) noted that “empirical research is needed to assess if specific religious factors played an important role or failed to play any role in actual behaviours...” (p. 5). The important gap left in the literature as far as the relationship between religions and environmental behaviour is concerned is surely an interesting one to explore.

CONCLUSION

In conclusion, this article has identified and reviewed the dimensions of theory, methodology and findings of the literature. It is worthy of note that religions, religious institutions and religious figures should be explored more as theoretical foundation to study their relationship with environmental behaviour. A major reason for this assertion is people’s moral (religious) reasoning does not simply stop when they are faced with other influences such as social extrinsic, economic, political or demographic factors in their daily activities. For example, one’s moral reasoning does not stop when one interact with neighbours, enter a supermarket (Thogersen, 2000), decides whether or not to comply with laws and regulations,

or whether one is a man or a woman. Those other factors might be more influential than the religious factors in people's daily decisions on their behaviour but the moral (religious) factors do not just simply vanish.

This article has also discovered that there are very limited empirical studies done on the issues of the relationship between religious factors and environmental behaviour. There were also lacks of variance in terms of religions covered and religious indicators used in the empirical studies to explain environmental behaviour. Most of the religious indicators used are personal in character and very few are situational in character. Those methodological limitations, the arguments on misinterpretation of religious texts and religious teachings, and the arguments that the majority of religious followers have distanced themselves from their religions dismissed any attempt to conclude that religious factors are negatively link to environmental behaviour as claimed by some authors such as White (1973) and Kalland (2002). More comprehensive empirical studies are needed for one to come to such conclusion.

NOTES

- * The English meaning of the Holy Qur'an used in this article is quoted from a translation by Abdullah Yusuf Ali at the URL: <http://www.al-islam.org/quran/> (24/10/02)
- * The English meaning of the Bible (the Old Testament - the chapter of Genesis) used in this article is quoted from the URL: <http://scriptures.lds.org/ot/contents> (30/07/05)
- ¹ More of substituting it with the cult of saints which is not in natural objects but in heaven (White 1973).
- ² For example the practice of placate the (guardian) spirit in charge (of protecting nature from human) before one cut a tree, mined a mountain or dammed a brook (White 1973).
- ³ Democracy, technology, urbanization, increasing individual wealth, and an aggressive attitude toward nature (Moncrief 1973).
- ⁴ "And the LORD God took the man, and put him into the [garden](#) of [Eden](#) to 'dress it and to [keep](#)' it."
- ⁵ "We have honoured the sons of Adam; provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favours, above a great part of our creation."
- ⁶ "We have indeed created man in the best of moulds"
- ⁷ "And behold, We said to the angels: "Bow down to Adam" and they bowed down. Not so Iblis: he refused and was haughty: He was of those who reject Faith."

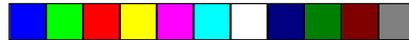
- 8 “It is He Who hath made you (His) agents, inheritors of the earth: He hath raised you in ranks, some above others: that He may try you in the gifts He hath given you: for thy Lord is quick in punishment: yet He is indeed Oft-forgiving, Most Merciful.”
- 9 “Behold, thy Lord said to the angels: “I will create a vicegerent on earth.” They said: “Wilt Thou place therein one who will make mischief therein and shed blood?- whilst we do celebrate Thy praises and glorify Thy holy (name)?” He said: “I know what ye know not.””
- 10 “A section of the People of the Book say: “Believe in the morning what is revealed to the believers, but reject it at the end of the day; perchance they may (themselves) Turn back.”
- 11 “Nay, man will be evidence against himself, Even though he were to put up his excuses.”
- 22 “Say: Who hath forbidden the beautiful (gifts) of Allah, which He hath produced for His servants, and the things, clean and pure, (which He hath provided) for sustenance? Say: They are, in the life of this world, for those who believe, (and) purely for them on the Day of Judgment. Thus do We explain the signs in detail for those who understand.”
- 33 “I have only created Jinns and men, that they may serve Me.”
- 14 “Do ye not see that Allah has subjected to your (use) all things in the heavens and on earth, and has made his bounties flow to you in exceeding measure, (both) seen and unseen? Yet there are among men those who dispute about Allah, without knowledge and without guidance, and without a Book to enlighten them!”
- 25 “And He has subjected to you, as from Him, all that is in the heavens and on earth: Behold, in that are Signs indeed for those who reflect.”
- 36 “Assuredly the creation of the heavens and the earth is a greater (matter) than the creation of men: Yet most men understand not.”
- 17 “There is not an animal (that lives) on the earth, nor a being that flies on its wings, but (forms part of) communities like you. Nothing have we omitted from the Book, and they (all) shall be gathered to their Lord in the end.”
- 18 “In order that ye may not transgress (due) balance. So establish weight with justice and fall not short in the balance. It is He Who has spread out the earth for (His) creatures.”
- 19 “At length, when they came to a (lowly) valley of ants, one of the ants said: “O ye ants, get into your habitations, lest Solomon and his hosts crush you (under foot) without knowing it.” So he smiled, amused at her speech; and he said: “O my Lord! so order me that I may be grateful for Thy favours, which thou hast bestowed on me and on my parents, and that I may work the righteousness that will please Thee: And admit me, by Thy Grace, to the ranks of Thy righteous Servants.””

- ²⁰ “When he turns his back, His aim everywhere is to spread mischief through the earth and destroy crops and cattle. But Allah loveth not mischief.”
- ²¹ “And tell them that the water is to be divided between them: Each one’s right to drink being brought forward (by suitable turns).”
- ²² “It is He Who has sent amongst the Unlettered a messenger from among themselves, to rehearse to them His Signs, to sanctify them, and to instruct them in Scripture and Wisdom, - although they had been, before, in manifest error.”

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