

Religion, Environmental Guilt, and Pro-environmental Support: The Opposing Pathways of  
Stewardship Belief and Belief in a Controlling God

**Study Materials**

**Study 1**

***Stewardship belief***

Please indicate the extent to which you agree or disagree with the following items.

1- Strongly Disagree, 4- Neither agree nor disagree, 7- Strongly Agree

Human beings should respect nature because it was created by God. (1)

We, as stewards of God, have a responsibility to take good care of the Earth and life in it. (2)

***Belief in a controlling god***

Please indicate the extent to which you agree or disagree with the following statements using the scale provided.

1- Strongly Disagree to 7- Strongly Agree

God is in complete control of the events happening within our College. (1)

Every single event that occurs in this world unfolds according to God's plan. (2)

There are things in the world that often occur without God's control. (3)

The life of every creature is determined by God's pre-existing plan. (4)

***Environmental guilt***

Please answer each statement using the scale provided.

1-Not at all to 5- Extremely

I feel guilty that humans today produce greenhouse gas emissions (by driving automobiles, consuming electricity, etc.). (1)

I feel regretful that humans today produce greenhouse gas emissions. (2)

I feel remorseful that humans today produce greenhouse gas emissions. (3)

***Support for pro-environmental organizations***

Thank you for your answer! The first part of the study is done. In following pages, you will participate in a second part of the study. Please read carefully the instructions below. This part of the study is, in conjunction with local non-profit organizations, to assess people's attitudes towards the organizations and their projects and initiatives. You will be given brief

descriptions of a list of non-profit organizations, and, for each organization, answer the following questions.

1. Projects: If you would like to be contacted by the organization with more information about their current projects and initiatives.
2. Volunteer: If you would like to be contacted by the organization when there is a volunteer opportunity.
3. Donation: If you would be willing to donate money to the organization (\*note: if you say yes here, you will be contacted by the organization when there is a fundraising campaign for specific projects).
4. Support: If you would like to sign a petition to support the organization (\*note: if you say yes here, your name will be shown in the list of supporters on the organization's webpage and in the documents to ask for funding and support from the government and donors).

Please write your email address that is checked regularly in case that the organization contacts you based on your answers.

When you are ready, please click the arrow below.



**Direct Relief**

<https://www.directrelief.org/>

Direct Relief <https://www.directrelief.org/>

Who we are/What we do: Direct Relief is a humanitarian aid organization, active in all 50 states and 70 countries, with a mission to improve the health and lives of people affected by poverty or emergencies. Direct Relief's assistance programs focus on maternal and child health, the prevention and treatment of disease, and emergency preparedness and response, and are tailored to the particular circumstances and needs of the world's most vulnerable and at-risk populations.

Projects: Would you like to be contacted by Direct Relief with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Volunteer: Would you like to be contacted by Direct Relief when there is a volunteer opportunity?

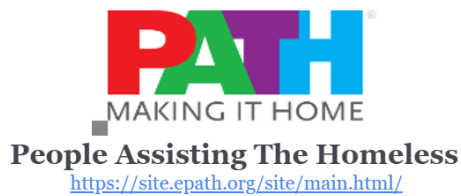
- ☐ Yes (1)
- ☐ No (2)

Donation: Would you be willing to donate money to Direct Relief?

- ☐ Yes (1)
- ☐ No (2)

Support: Would you sign a petition to support Direct Relief?

- ☐ Yes (1)
- ☐ No (2)



Q32 People Assisting The Homeless <https://site.epath.org/site/main.html/>

Who we are/What we do: PATH is a family of agencies working together to end homelessness for individuals, families, and communities. We strive to do this by prioritizing housing while providing customized supportive services for people in need. Our agencies each address homelessness in a different way—supportive services, permanent housing development, support for homeless families, and community engagement—all of which ultimately help the people we serve make it home.

Q46 Projects: Would you like to be contacted by PATH with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Q47 Volunteer: Would you like to be contacted by PATH when there is a volunteer opportunity?

- ☐ Yes (1)
- ☐ No (2)

Q49 Donation: Would you be willing to donate money to PATH?

- ☐ Yes (1)
- ☐ No (2)

Q48 Support: Would you sign a petition to support PATH?

- ☐ Yes (1)
- ☐ No (2)



Q282 Explore Ecology <https://www.exploreecology.org/>

Who we are/What we do: Explore Ecology delivers a variety of environmental programs to enhance the understanding of the connections between people and their environment, and to encourage creative thinking through hands-on science education and art discovery. Our work addresses how individuals can effect positive environmental change, with a focus on teaching about the interconnectedness of environmental issues, stressing the importance of individual choices and actions, promoting problem solving skills through exploration with reuse materials, and facilitating individual actions through community services learning projects.

Q50 Projects: Would you like to be contacted by Explore Ecology with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Q51 Volunteer: Would you like to be contacted by Explore Ecology when there is a volunteer opportunity?

- ☐ Yes (1)
- ☐ No (2)

Q53 Donation: Would you be willing to donate money to Explore Ecology?

- ☐ Yes (1)
- ☐ No (2)

Q52 Support: Would you sign a petition to support Explore Ecology?

- ☐ Yes (1)
- ☐ No (2)



**Community Environmental Council**

<https://www.cecsb.org/>

Q35 Community Environmental Council <https://www.cecsb.org/>

Who we are/What we do: CEC's mission is to identify, advocate, and raise awareness about the most pressing environmental issues in the Santa Barbara region. Today, CEC is focused on pioneering real life solutions in areas with the biggest impact on climate change. CEC is a "think-and-do tank"- analyzing a problem and then applying real-world solutions to it. CEC's process for creating social change is: a) Identify a critical community need, b) Raise awareness about that need (often by setting a challenge goal for the community), c) Push state and local government to change laws and regulations that affect the issue, d) Take direct action ourselves toward that need, and e) Spur the community to adopt new behaviors.

Q54 Projects: Would you like to be contacted by Community Environmental Council with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Q55 Volunteer: Would you like to be contacted by Community Environmental Council when there is a volunteer opportunity?

- ☐ Yes (1)
- ☐ No (2)

Q56 Donation: Would you be willing to donate money to Community Environmental Council?

- ☐ Yes (1)
- ☐ No (2)

Q57 Support: Would you sign a petition to support Community Environmental Council?

- ☐ Yes (1)
- ☐ No (2)



**Environmental Defense Center**

<https://www.environmentaldefensecenter.org/>

Q37 Environmental Defense Center <https://www.environmentaldefensecenter.org/>  
Who we are/What we do: The Environmental Defense Center protects and enhances the environment of California's south central coast through education, advocacy, and legal action. Since 1977, we have empowered community-based organizations to advance environmental protection. Our program areas include climate and energy, protecting open space and wildlife, clean water, and the Santa Barbara Channel.

Q58 Projects: Would you like to be contacted by Environmental Defense Center with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Q59 Volunteer: Would you like to be contacted by Environmental Defense Center when there is a volunteer opportunity?

- ☐ Yes (1)
- ☐ No (2)

Q60 Donation: Would you be willing to donate money to Environmental Defense Center?

- ☐ Yes (1)
- ☐ No (2)

Q61 Support: Would you sign a petition to support Environmental Defense Center?

- ☐ Yes (1)
- ☐ No (2)



Heal the Ocean Santa Barbara

<https://healtheocean.org/>

Q39 Heal the Ocean Santa Barbara <https://healtheocean.org/>

Who we are/What we do: Heal the Ocean focuses on wastewater infrastructure – sewers and septic systems – as well as ocean dumping practices that have contributed to ocean pollution. The primary areas of Heal the Ocean are water pollution and water scarcity. To the city and county agencies that need to deal with both water pollution and scarcity, we bring experts and funds into a bad situation to create change. We help wastewater plants upgrade to recycled water, help homeowners get off septic systems in unsuitable areas, and mount very big projects to clean up contaminated groundwater.

Q62 Projects: Would you like to be contacted by Heal the Ocean SB with more information about their current projects and initiatives?

- ☐ Yes (1)
- ☐ No (2)

Q63 Volunteer: Would you like to be contacted by Heal the Ocean SB when there is a volunteer opportunity?

- ☐ Yes (1)
- ☐ No (2)

Q64 Donation: Would you be willing to donate money to Heal the Ocean SB?

- ☐ Yes (1)
- ☐ No (2)

Q65 Support: Would you sign a petition to support Heal the Ocean SB?

- ☐ Yes (1)
- ☐ No (2)

## Study 2

### *Stewardship belief*

Please indicate the extent to which you agree or disagree with the following items.

1- Strongly Disagree, 4- Neither agree nor disagree, 7- Strongly Agree

Human beings should respect nature because it was created by God. (1)

We, as stewards of God, have a responsibility to take good care of the Earth and life in it. (2)

### *Belief in a controlling god*

Please indicate the extent to which you agree or disagree with the following statements using the scale provided.

1- Strongly Disagree to 7- Strongly Agree

God is in complete control of the events happening in the world. (1)

Every single event that occurs in this world unfolds according to God's plan. (2)

There are things in the world that often occur without God's control. (3)

The life of every creature is determined by God's pre-existing plan. (4)

### ***Environmental guilt***

Please indicate how you feel when thinking about environmental problems using the scale below.

When thinking about environmental problems occurring now (e.g., climate change, air and water pollution, deforestation, loss of biodiversity, etc.)...

1-Not at all to 5- Extremely

I feel guilty.

I feel regretful.

I feel remorseful.

### ***Pro-environmental policy support***

A number of environmental policies have been proposed in the United States. How much do you support or oppose the following actions:

Strongly Oppose (1) Oppose (2) Support (3) Strongly Support (4)

Regulating carbon dioxide as a pollutant

Signing an international treaty that requires the United States to cut its carbon dioxide emissions by 90% by 2050

Adding a surcharge to electrical bills to establish a fund to help make buildings more energy efficient and to teach US citizens how to reduce energy use

Requiring electric utilities to produce at least 20% of their electricity from renewable energy sources

Please select "Support" for this item. - *attention check item*

Providing tax rebates for people who purchase energy-efficient vehicles or solar panels

Increasing taxes on gasoline (by 25 cents per gallon) and returning the revenues to taxpayers by reducing the federal income tax

## **Study 3**

### ***Priming materials – Stewardship condition***

We are interested in how people process religious material. You will be reading some parts of the Bible with interpretations. Please read carefully. Press continue when you are ready to begin.

Humans, Stewards of His Creation

By BRIAN WILLIAMS 9 hours ago

Many verses in the Bible tell us that God wants humans to take care of the environment and to keep it from harm, as stewards of his creation.

Leviticus 25:23

"The land must not be sold permanently, because the land is mine and you are but aliens and my tenants."

Isaiah 11:9

"They will neither harm nor destroy on all my holy mountain, for the earth will be full of the knowledge of the LORD as the waters cover the sea."

Isaiah 24:5-6

"The earth is defiled by its people; they have disobeyed the laws, violated the statutes and broken the everlasting covenant. Therefore a curse consumes the earth; its people must bear their guilt. Therefore earth's inhabitants are burned up, and very few are left."

These passages suggest that God cares about the Earth he created and wants us to nurture and take care of it. Abusing this land is violating what God wants and is breaking the duty as a Christian.

Many Christians believe that we are stewards of the environment created by God. God has blessed us with this beautiful and perfect land. If this land is destroyed by our actions, we must then bear the guilt for our sins. Taking care of the environment is our sacred duty.

Please briefly summarize the material you just read above. One or two sentences are sufficient. Just try to write the key message from the material.

---

### ***Priming materials – Controlling god condition***

We are interested in how people process religious material. You will be reading some parts of the Bible with interpretations. Please read carefully. Press continue when you are ready to begin.

God, the Ultimate Controller of the World  
By BRIAN WILLIAMS 9 hours ago

Many verses in the Bible tell us that God is sovereign and is completely in control of this world.

Isaiah 40:23

"He brings princes to naught and reduces the rulers of this world to nothing.."

Psalms 74:16-17

"The day is yours, and yours also the night; you established the sun and moon. It was you who set all the boundaries of the earth; you made both summer and winter. "

Romans 9:15-16

"for he says to Moses, 'I will have mercy on whom I have mercy, and I will have compassion on whom I have compassion. It does not, therefore, depend on human desire or effort, but on God's mercy. '"

These passages suggest that what happens in this world depends on God. If he holds back the waters, there is drought; if he lets them loose, they devastate the land. What he tears down cannot be rebuilt; the man he imprisons cannot be released.

Many Christians believe that God, as the ruler of the universe, is in control of all things that have happened, are happening, and will happen in the future. It is God who determines whether good or bad happens in the world. However, even if he allows troubles to happen, we know that in all things, he works for the good of those who love him. Everything is under his good plan.

Q25 Please briefly summarize the material you just read above. One or two sentences are sufficient. Just try to write the key message from the material.

---

### ***Priming materials – Control condition***

We are interested in how people process science-related material. You will be reading a short article about Pluto. Please read carefully. Press continue when you are ready to begin.

Declassification of Pluto as a Planet  
By BRIAN WILLIAMS 9 hours ago

Pluto's official status as a planet has been a constant subject of controversy, fueled by the past lack of a clear definition of planet, since at least as early as 1992, when the first Kuiper Belt Object, 1992 QB1, was discovered.

There are three main conditions for an object to be called a 'planet', according to the International Astronomers' Union resolution passed August 24, 2006.

1. The object must be in orbit around the Sun.
2. The object must be massive enough to be a sphere by its own gravitational force. More specifically, its own gravity should pull it into a shape of hydrostatic equilibrium.
3. It must have cleared the neighborhood around its orbit.

Pluto fails to meet the third condition, and thus, it was relegated to "dwarf-planet" status by IAU in 2006. Interestingly, amongst the general public, reception was mixed. Some accepted the reclassification, while there was widespread outrage on behalf of the demoted planet. Some were seeking to overturn the decision, with online petitions urging the IAU to consider reinstatement. A resolution introduced by some members of the California state assembly light-heartedly denounced the IAU for "scientific heresy," among other crimes.

Please briefly summarize the material you just read above. One or two sentences are sufficient. Just try to write the key message from the material.

---

### ***Stewardship belief***

Please indicate the extent to which you agree or disagree with the following items.

1- Strongly Disagree, 4- Neither agree nor disagree, 7- Strongly Agree

Human beings should respect nature because it was created by God. (1)

We, as stewards of God, have a responsibility to take good care of the Earth and life in it. (2)

### ***Belief in a controlling god***

Please indicate the extent to which you agree or disagree with the following statements using the scale provided.

1- Strongly Disagree to 7- Strongly Agree

God is in complete control of the events happening in the world. (1)

Every single event that occurs in this world unfolds according to God's plan. (2)

Environmental changes on the Earth take place under the God's plan. (3)

God controls the climate and its change. (4)

### ***Environmental guilt***

Please indicate how you feel when thinking about environmental problems using the scale below.

When thinking about environmental problems occurring now (e.g., climate change, air and water pollution, deforestation, loss of biodiversity, etc.)...

1-Not at all to 5- Extremely

I feel guilty.

I feel regretful.

I feel remorseful.

### ***Pro-environmental policy support***

A number of environmental policies have been proposed in the United States. How much do you support or oppose the following actions:

Strongly Oppose (1) Oppose (2) Support (3) Strongly Support (4)

Regulating carbon dioxide as a pollutant

Signing an international treaty that requires the United States to cut its carbon dioxide emissions by 90% by 2050

Adding a surcharge to electrical bills to establish a fund to help make buildings more energy efficient and to teach US citizens how to reduce energy use

Requiring electric utilities to produce at least 20% of their electricity from renewable energy sources

Please select "Support" for this item. - *attention check item*

Providing tax rebates for people who purchase energy-efficient vehicles or solar panels

Increasing taxes on gasoline (by 25 cents per gallon) and returning the revenues to taxpayers by reducing the federal income tax

### ***Donation***

As we mentioned, **a selected winner will get a \$10 bonus**. You will be entered into a lottery for the \$10 bonus, and if you win, we will give you the bonus in addition to the

compensation that you had agreed to receive by participating in this study.

If you want, **you can choose to donate whatever amount of the bonus \$10** to a non-profit environmental advocacy organization, called **Natural Resources Defense Council**, whose mission is "*to safeguard the earth, its people, its plants and animals, and the natural systems on which all life depends.*" The New York Times calls NRDC "*One of the nation's most powerful environmental groups.*" If you'd like to learn more about the organization, kindly visit their website at <https://www.nrdc.org/>

Please **indicate below how much you would like to donate, if you were to win the \$10 bonus**. You will then keep \$10 less the indicated donation amount (e.g. if you indicated that you would donate \$7, you will get to keep \$3; if you indicated that you would donate \$3, you will get to keep \$7). Remember that you will still get your originally agreed compensation regardless of whether you win the lottery or not.