

Pilot Study

Ninety-nine introductory psychology students (13 males, 86 females) were recruited to complete an online, mixed-methods survey. All respondents were between 18 and 24 years old, 81% identified as white/Caucasian (with 3% identifying as black/African American, 5% as Hispanic, 8% as Asian, and 3% as multiracial/other) and 91% were US citizens. The sample was largely from a white-collar background: most participants reported that one or both of their parents had at least a bachelor's degree (70%), reported that their family and community was best characterized as working in professional/managerial settings (69%), and considered themselves to be a 7 or higher on a 1-10 ladder of how well-off people are in society (73%). Participants were fairly evenly distributed on the political spectrum, with slightly more participants identifying as liberal/very liberal (40%) than either moderate (34%) or conservative (25%, 0% identified as very conservative).

Participants were randomly assigned to answer a series of questions about either "environmental activists" or "scientists at the EPA". Participants completed a series of qualitative ratings of the target they had been selected to examine (including caring, expertise, and shared motives), then provided a written description of why they had considered when completing these questions.

T-tests suggested that no meaningful or statistically significant differences between whether the target group rated was environmental activists or scientists at the EPA were found on relevant outcome measures of caring, shared motives, or expertise, $ps > .44$, Cohen's $ds < .10$.

In contrast, a qualitative examination of participants' open-ended descriptions revealed that participants seemed to find it easier to imagine environmental activists than scientists at the EPA. Some respondents imagined scientists at the EPA that fit more or less in line with my

intentions of individuals that could be potentially be considered as references to guide expectations of policy support, with one participant remarking *“When I think about the EPA, I think about the people who try to regulate what everyone does, how people get rid of trash, and what people feel about how we should be progressing as a nation environmentally”* and another remarking that *“The environmental protection agency. These are the people who are very involved and informed of the everyday life of a human. They create laws to ensure the protection of human health and the environment. They are extreme environmentalists and will do anything to help save the environment.”* However, many others were unfamiliar with EPA scientists as a whole. A common response was that they did not know anyone at the EPA, with one participant remarking *“I do not know any EPA scientists”* while another stated *“I do not know anyone directly associated with the EPA. I thought of scientists in general when considering this topic.”* A third stated *“I’m not really sure what is meant by scientists at the EPA. I tried to picture environmentalists to answer the questions”* while another simply stated *“Im [sic] not sure.”*

In contrast, respondents seem to have a clear picture of what they considered to be “environmental activists.” Many respondents considered someone in their personal life, with a common response being similar to the following: *“This reminded me of a course i [sic] took in high school called AP environmental science. My teacher, Mr. Ferraro, was the person who i thought about when answering these questions”* or *“The person I had in mind during this study was my BiSci 003 professor. He is very passionate about his work as an environmental advocate, and often comes off to students as pretentious etc. I see where he is coming from, which is why I do not necessarily dislike him as others do, but I do feel very targeted during some of his lectures, which could be due to personal guilt. That feeling is where most of my responses to this study came from.”*

Main Study Full Survey

Q36 For this first section, we would like you to reflect on how times in which you were motivated to act in an environmentally-friendly manner.

Think of protecting the environment broadly, including taking personal actions (e.g. taking the bus, bicycling, or walking instead of driving, recycling) and community actions (e.g. talking with someone about how to be environmentally friendly, voting for a candidate because they were environmentally friendly, attending a rally or protest designed to promote environmental sustainability, and donating to an environmental organization).

Q5 Please list three different situations in which you acted in an environmentally-friendly manner. These situations can be recent things that you did, representative of things you do on a regular basis, or a situation that symbolizes something that is a particularly important part of who you are as a person.

- First situation (1) _____
- Second situation (2) _____
- Third situation (3) _____

Q7 Now, imagine the life of an environmental activist. Using your imagination or real-life experiences that you have had, please describe three situations in which environmental activists might act in an environmentally friendly manner.

- First situation (1) _____
- Second situation (2) _____
- Third situation (3) _____

Q6 For this next section, we would like you to reflect on how people's values might motivate their actions. A value is "a person's principles or standards of behavior; one's judgment of what is important in life."

For example, one person might hold the values of freedom and equality particularly highly, and another might value the idea of "do unto others as you would have them do unto you".

Q8 You wrote about the following situation in which you acted to protect the environment.

"\${Q5/ChoiceTextEntryValue/1}"

How would you describe the value that motivated you to act here?

Q31 You wrote about the following situation in which you acted to protect the environment.

"\${Q5/ChoiceTextEntryValue/2}"

How would you describe the value that motivated you to act here?

Q32 You wrote about the following situation in which you acted to protect the environment.

"\${Q5/ChoiceTextEntryValue/3}"

How would you describe the value that motivated you to act here?

Q33 You wrote about the following situation in which an environmental activist might act to protect the environment.

"\${Q7/ChoiceTextEntryValue/1}"

How would you describe the value that may have motivated the environmental activist to act here?

Q34 You wrote about the following situation in which an environmental activist might act to protect the environment.

"\${Q7/ChoiceTextEntryValue/2}"

How would you describe the value that may have motivated the environmental activist to act here?

Q35 You wrote about the following situation in which an environmental activist might act to protect the environment.

"\${Q7/ChoiceTextEntryValue/3}"

How would you describe the value that may have motivated the environmental activist to act here?

Q30 You wrote about the following value that motivated you to protect the environment.

" **#{Q8/ChoiceTextEntryValue}** "How likely do you think it is that **an environmental activist** would be motivated by a similar value to act in an environmentally-friendly manner?

- Extremely unlikely (1)
 - Moderately unlikely (2)
 - Slightly unlikely (3)
 - Neither likely nor unlikely (4)
 - Slightly likely (5)
 - Moderately likely (6)
 - Extremely likely (7)
-

Q9 You wrote about the following value that motivated you to protect the environment.

"**#{Q31/ChoiceTextEntryValue}**"

How likely do you think it is that **an environmental activist** would be motivated by a similar value to act in an environmentally-friendly manner?

- Extremely unlikely (1)
- Moderately unlikely (2)
- Slightly unlikely (3)
- Neither likely nor unlikely (4)
- Slightly likely (5)
- Moderately likely (6)
- Extremely likely (7)

Q10 You wrote about the following value that motivated you to protect the environment.

"**#{Q32/ChoiceTextEntryValue}**"

How likely do you think it is that **an environmental activist** would be motivated by a similar value to act in an environmentally-friendly manner?

- Extremely unlikely (1)
- Moderately unlikely (2)
- Slightly unlikely (3)
- Neither likely nor unlikely (4)
- Slightly likely (5)
- Moderately likely (6)
- Extremely likely (7)

Q12 You wrote about the following value that might motivate an environmental activist to protect the environment.

"\${Q33/ChoiceTextEntryValue}"

How likely do you think it is that **you** would be motivated by a similar value to a similar value to act in an environmentally-friendly manner?

- Extremely unlikely (1)
- Moderately unlikely (2)
- Slightly unlikely (3)
- Neither likely nor unlikely (4)
- Slightly likely (5)
- Moderately likely (6)
- Extremely likely (7)

Q13 You wrote about the following situation in which an environmental activist's values might motivate them to protect the environment.

"\${Q34/ChoiceTextEntryValue}"

How likely do you think it is that **you** would be motivated by a similar value to act similarly?

- Extremely unlikely (1)
- Moderately unlikely (2)
- Slightly unlikely (3)
- Neither likely nor unlikely (4)
- Slightly likely (5)
- Moderately likely (6)
- Extremely likely (7)

Q14 You wrote about the following situation in which an environmental activist's values might motivate them to protect the environment.

"\${Q35/ChoiceTextEntryValue}"

How likely do you think it is that **you** would be motivated by a similar value to act similarly?

- Extremely unlikely (1)
- Moderately unlikely (2)
- Slightly unlikely (3)
- Neither likely nor unlikely (4)
- Slightly likely (5)
- Moderately likely (6)
- Extremely likely (7)

Values Now we would like you to answer some questions about environmental activists. Upon the reflection that you have engaged in throughout this exercise, please indicate the extent to which you agree with each of the following statements.

	Strongly disagree (-3)	Disagree (-2)	Somewhat disagree (-1)	Neither agree nor disagree (0)	Somewhat agree (1)	Agree (2)	Strongly agree (3)
Environmental activists and I do NOT share similar values. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental activists hold the same moral values as I do. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental activists do NOT see the world the way I do. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate you are paying attention by selecting disagree to answer this question (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I value the same things that environmental activists value. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Now, a little about yourself. Please complete the following questions.

Q18 What is your gender?

- Male (1)
- Female (2)
- Other (3) _____

Q20 What is your age?

▼ Under 18 years (1) ... 65+ years (7)

Q22 What is your nationality?

- United States (0)
- Other (please specify) (1) _____

Q24 What is your race?

- White/Caucasian (1)
- Black/African American (2)
- Hispanic (3)
- Asian (4)
- Native American (5)
- Pacific Islander (6)
- Multiracial/Other (7) _____

Q32 Which of the following best describes your political views?

- very liberal (-2)
- liberal (-1)
- moderate (0)
- conservative (1)
- very conservative (2)

Q34 To what extent do you consider yourself an environmental activist?

- Not at all (1)
- Slightly (2)
- Somewhat (3)
- Quite a bit (4)
- Very much (5)

Q36 Which of the following do you believe best describes your reaction to climate change?

- Very concerned:** I am very concerned about climate change and think the government and individuals need to act now. (3)
- Concerned:** I am concerned about climate change and think we need to take action but we have time to decide what the appropriate responses should be. (2)
- Cautious:** I suspect that climate change is happening but I am not certain. We have time to make careful decisions about when and whether to respond to climate change. (1)
- Disengaged:** I have not really thought much about climate change. (0)
- Doubtful:** I suspect that climate change is NOT happening but I am not certain. I am concerned more about overreacting to climate change. (-1)
- Nonbeliever:** I do not believe climate change is occurring and certainly do not think humans have caused change change. So, I'm not motivated to take or support action to address it. (-2)

Q38 Do you have any other comments about the survey?

Q40 What do you think the purpose of this survey was?

References

- Bashir, N. Y., Lockwood, P., Chasteen, A. L., Nadolny, D., & Noyes, I. (2013). The ironic impact of activists: Negative stereotypes reduce social change influence. *European Journal of Social Psychology, 43*(7), 614–626. <https://doi.org/10.1002/ejsp.1983>
- Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research, 21*(1), 37–47. <https://doi.org/10.1002/capr.12360>
- Hoffarth, M. R., & Hodson, G. (2016). Green on the outside, red on the inside: Perceived environmentalist threat as a factor explaining political polarization of climate change. *Journal of Environmental Psychology, 45*, 40–49. <https://doi.org/10.1016/j.jenvp.2015.11.002>
- Swim, J. K., & Geiger, N. (2018). The gendered nature of stereotypes about climate change opinion groups. *Group Processes and Intergroup Relations, 21*(3), 436–456. <https://doi.org/10.1177/1368430217747406>