

#### **Supplement 4. Questions Included in Pre-Test and Post-Test Surveys**

##### **Nature Relatedness [1]**

For each of the following, please rate the extent to which you agree with each statement, using the scale from 1 to 5 (Strongly Disagree to Strongly Agree) as shown below. Please respond as you really feel, rather than how you think “most people” feel.

- My ideal vacation spot would be a remote, wilderness area.
- I always think about how my actions affect the environment.
- My connection to nature and the environment is a part of my spirituality.
- I take notice of wildlife wherever I am.
- My relationship to nature is an important part of who I am.
- I feel very connected to all living things and the earth.

##### **Environmental Concern [2]**

People around the world are generally concerned about environmental problems because of the consequences that result from harming nature. However, people differ in the consequences that concern them the most. Please rate each of the following items from 1 to 7 (not at all important to extremely important) as shown below in response to the question:

I am concerned about environmental problems because of the consequences for \_\_\_\_\_.

Plants

Marine life

Birds

Animals

Me

My lifestyle

My health

My future

People in my country

All people

Children

Future generations

##### **Climate Change Knowledge [3]**

1. Recently, you may have noticed that global warming has been getting some attention in the news. Global warming refers to the idea that the world’s average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world’s climate may change as a result. What do you think? Do you think that global warming is happening?

- a. Yes
  - b. No
  - c. Don't know
- 1a. (if answered yes to the previous question) How sure are you that global warming is happening?
- a. Extremely sure
  - b. Very sure
  - c. Somewhat sure
  - d. Not at all sure
- 1b. (if they answer no to the previous question) How sure are you that global warming is not happening?
- a. Extremely sure
  - b. Very sure
  - c. Somewhat sure
  - d. Not at all sure
2. Assuming global warming is happening, do you think it is:
- a. Caused mostly by human activities
  - b. Caused by both human activities and natural changes
  - c. Caused mostly by natural changes in the environment
  - d. None of the above because global warming isn't happening
  - e. Other
  - f. Don't know
3. Which comes close to your own view?
- a. Most scientists think global warming is happening
  - b. Most scientist think global warming is not happening
  - c. There is a lot of disagreement among scientists about whether or not global warming is happening
  - d. Don't know enough to say
4. Have you ever heard of the "greenhouse effect"?
- a. Yes
  - b. No
5. (if answered yes to the previous question) The "greenhouse effect" refers to:
- a. Gasses in the atmosphere that trap heat
  - b. The Earth's protective ozone layer
  - c. Pollution that causes acid rain
  - d. How plants grow
  - e. Don't know
6. Which of the following gasses in the atmosphere are good at trapping heat from the Earth's surface? (select all that apply)
- Methane
  - Water vapor
  - Hydrogen

- Oxygen
  - Don't know
7. Are each of the following statements definitely true, probably true, probably false, definitely false, or you do not know? [Definitely true (1) Probably true (2) Probably false (3) Definitely false (4) Don't know (5)]
- ☐ Weather often changes from year to year.
  - ☐ Climate means the average weather conditions in a region.
  - ☐ Climate often changes from year to year.
  - ☐ Ocean currents carry heat from the equator toward the north and south poles.
  - ☐ Weather means the average climate conditions in a region.
  - ☐ Climate and weather mean pretty much the same thing.
  - ☐ The atmosphere carries heat from the north and south poles toward the equator.
8. Which of the following are "fossil fuels"? (select all that apply)
- Oil
  - Natural gas
  - Wood
  - Hydrogen
  - Solar Energy
9. To the best of your knowledge, roughly how much carbon dioxide is in the atmosphere today?
- a. 300 parts per million
  - b. 350 parts per million
  - c. 400 parts per million
  - d. 450 parts per million
  - e. Don't know
10. Are each of the following statements definitely true, probably true, probably false, definitely false, or do you not know? [Definitely true (1), Probably true (2), Probably false (3), Definitely false (4), Don't know (5)]
- ☐ Global warming will cause some places to get wetter, while others will get drier.
  - ☐ The decade from 2000 to 2009 was warmer than any other decade since 1850.
  - ☐ Global warming will increase crop yields in some places, and decrease it in others.
  - ☐ Global warming will cause temperatures to increase by roughly the same amount in all countries.
  - ☐ The record snowstorms this winter in the western United States prove that global warming is not happening.
  - ☐ Global warming is happening, but will be more beneficial than harmful.
  - ☐ Global warming will cause most of the glaciers to melt away
  - ☐ Global warming will cause global sea level rise.
11. How much do you think each of the following actions would reduce global warming if they were done worldwide? [A lot (1), Some (2), A little (3), Not at all (4), Don't know (5)]
- ☐ Switching from fossil fuels to renewable energy (wind, solar, geothermal)
  - ☐ Planting trees

- Reducing tropical deforestation
- Reducing toxic waste (nuclear, chemical)
- Switching from gasoline to electric cars
- Driving less
- Increasing public transportation
- Switching from regular (incandescent) to compact fluorescent light bulbs
- Insulating buildings
- Switching from fossil fuels to nuclear power
- Banning aerosol spray cans
- Stop punching holes in the ozone layer with rockets
- Placing a large tax on all fossil fuels
- Having at most 2 children per family
- Fertilizing the ocean to make algae grow faster
- Stop eating beef
- Using airplanes to scatter dust high in the atmosphere

## References

1. Nisbet, E.K.; Zelenski, J.M. The NR-6: A new brief measure of nature relatedness. *Frontiers in Psychology* **2013**, *4*, doi:10.3389/fpsyg.2013.00813.
2. Schultz, P.W. The structure of environmental concern: Concern for self, other people, and the biosphere. *Journal of Environmental Psychology* **2001**, *21*, 327-339, doi:10.1006/jevp.2001.0227.
3. Leiserowitz, A.; Smith, N.; Marlon, J.R. Americans' Knowledge of Climate Change. **2010**.