CEJS Faculty Fellowship Final Report Jonathan Pierce Institute of Public Service

Description of Research Project

Our research project explored how to persuade climate change skeptics. We focused our research on the US public. A 2016 Pew Research Center poll found that approximately 52% of Americans do not believe the earth is warming mostly due to human activities, and among political conservatives 85% are skeptical. Therefore, there is a clear disconnect between the US public and climate scientists on this issue and climate change mitigation policies depend in part on public acceptance and support. Our overall research question was, how do we persuade climate change skeptics? Past empirical research has shown that using scientific facts does not persuade skeptics. In addition, empirical research has found that messages to conservatives about climate change tend to cause biased skepticism often leading to a negative response when told about climate change. The purpose of our research was to utilize experimental surveys to measure the persuasiveness of various forms of strategic communication about climate change to see if they were more persuasive among conservatives and liberals than scientific statements.

Activities and Progress to Date

We have a research team of nine people including myself, undergraduate and graduate students from SU, and we are collaborating with a faculty member and Ph.D. student from Oregon State University. No one is getting paid for their participation. As part of this collaboration we met weekly from June 1, 2016 to May 31, 2017. During that time, we completed a literature review of the empirical work concerning what influences public beliefs about climate change. Based on this literature review and personal correspondence with various authors, and reviews of advocacy organizations, government organizations, and news media we developed multiple forms of strategic communication about climate change as well as using current texts from advocacy organizations, newspapers, and energy corporations. To test the effect of these forms of communication on the beliefs of the US public, we designed multiple experimental surveys that were piloted in February, 2017 and formally launched in March, 2017. The funding from the fellowship was used to pay respondents via Amazon's Mechanical Turk. The amount per participated varied between \$0.50 and \$2.00 depending on the survey length and use of pre-screened qualifiers such as only conservatives. For this research, we applied for and received exempt status from Seattle University's Institutional Review Board. In total, we surveyed over 2,500 respondents using a wide range of experimental forms of communications and comparing them to a control of scientific statements.

At this time, we have completed analysis of a small part of this data and began dissemination. As part of this dissemination process we have authored the following oral presentations and written documents.

We have presented our research design at the CEJS brownbag event in February, 2017, as well as at the Institute of Public Service brownbag event in February, 2017.

The results were presented at a SU undergraduate course as a guest speaker in Environmental Politics as part of the Environmental Studies program.

The research was also presented in the form of a poster, and two oral presentations at an academic conference – Midwest Political Science Association Annual Conference in Chicago, IL in April, 2017. As part of that conference two of the research assistants on the project, a graduate and an undergraduate student, attended the conference along with myself. The undergraduate student presented a poster during the conference, and the graduate student assisted in the development of both presentations and co-presented one of the papers. In total, there were six co-authors on the two conference papers that are Seattle University students and a seventh student that produced the poster.

Part of the funding from the fellowship was used to support the SU graduate and undergraduate students to attend the conference described above. This funding supplemented the funding they received from SU's ORSSP.

Based on this research a technical report has been completed describing the results. We are in the process of distributing this report to local environmental advocacy organizations such as 350. Seattle, Climate Action Network, CarbonWA, and other organizations.

This research is also being used in the classroom. The research is being presented as part of the Masters of Public Administration degree program in the PUBM 5430 Research Design course.

Future Activities

We are revising the conference papers for submission to peer review environmental policy journals. In addition, we plan on continuing to analyze the data that we have collected and develop additional papers for peer review submission. Multiple SU students are co-authors on these papers.

We will be presenting the results of this research at the Mid-Career Institute for Environmental Leaders at Seattle University in June, 2017. As part of this presentation, two of the graduate students working on the project will co-present.

An additional proposed paper has been submitted and accepted for a conference panel at the European Consortium for Political Research in September, 2017 in Oslo, Norway. I will be presenting the results of this research at this conference.

Overall, I will continue to work with multiple SU graduate and undergraduate students during the next year analyzing the data we collected, and reporting the results in the form of manuscripts to academic journals, presentations to practitioners and academics, technical reports for non-profit and environmental advocacy organizations, and in-class presentations at SU.

I greatly appreciated this opportunity that CEJS provided. It was critical for both my professional development, as well as the learning experience and professional development of seven SU students.