

Prioritizing Values: Segmenting Texas Residents by Climate Change Perceptions

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Introduction & Conceptual Framework

Many strategic messaging efforts have been determined to convince people both that climate change is happening and action should be taken. Despite the agreement in the scientific community that climate change is primarily human-caused and will have drastic negative consequences on modern life (AAAS, 2022), some Americans perceive climate change as not happening or due to natural weather variation. In 2019, only 46% of Americans said human activity contributes a great deal to climate change and only 17% of Republicans held this belief (Funk & Hefferon, 2019). Perceiving human activity as the cause of climate change has been called a “gateway belief” to worrying about climate change and consequently taking action (Van der Linden et al., 2019). Put simply, if people do not believe human behavior influences climate change, they logically won’t believe human behavior can help stop climate change. For this reason, populations of “climate change skeptics” have been the main audience of interest for communication strategies. To reach unique audiences, strategic communication scholarship has encouraged practitioners to avoid one-size-fits all messages and tailor messages to segmented audiences for maximum impact (Agunda, 1989; Lee & Kotler, 2020).

Audience segmentation helps practitioners identify target audiences by grouping a population into distinctly different sub-groups based on similar characteristics (i.e., values, beliefs, preferences). This strategy has been used across social marketing efforts, from climate change (Hine et al., 2014) to water conservation messages (Huang et al., 2016; Warner et al., 2017) and sustainable farming (Gibson, 2020), based on the understanding that messages that appeal to the audiences’ preexisting beliefs can avoid cognitive dissonance and encourage positive, central message processing. Within audience segmentation, values in particular play a key role in message processing and have been used to segment audiences across topics (Fischer et al., 2020; Shen & Edwards, 2005). Values play an important role in characterizing “cultural groups, societies, and individuals, to trace change over time, and to explain the motivational bases of attitude and behavior” (Schwartz, 2012, p. 3). Schwartz Theory of Basic Human Values (2012) provides a framework for identifying and describing eight motivationally and distinct types of values that people of all cultures recognize: *power, achievement, hedonism, self-direction, universalism, benevolence, tradition, and security*. The study at hand addresses the National AAAE Research Agenda priority seven, addressing complex problems (i.e., climate change). The purpose of the study was to segment populations by creating value profiles based on respondents’ perception of the cause of climate change.

Methodology

An online Qualtrics survey instrument was administered to 533 Texas residents from October to November of 2021. Qualtrics obtained a non-probability, opt-in sample of Texas residents 18-years or older who represented the state’s census demographics for age and community type. Respondents were disqualified if they sped through the survey or took too long, and 486 usable responses remained. Values were measured using the Short-Schwartz value scale (Schwartz, 2021) where respondents were given a list of values and their definition and instructed “Please rate the importance of the following values as a life-guiding principle for you” on an 8-point

scale from 0 = *Opposed to my principles* to 8 = *Of Supreme Importance to my principles*. Climate change perceptions were measured categorically to the statement “which of the following best describes your views about climate change” with the five options listed in the section below (Abdel-Monem et al., 2014). Data were analyzed in SPSS by using the “split file” function to create descriptive outputs for each climate change perception.

Results

Those who perceived climate change is caused by natural activity valued *power* more than all other groups and were mostly very conservative. Those in agreement with the scientific consensus (i.e., caused by human activity) valued *benevolence*, *universalism*, *self-direction*, and *hedonism* the most of any group and were mostly moderate. The group that cited equal contributions from human and natural causes tended to value *benevolence* and *security* more than other values and be primarily moderate. Those who believed there was not enough evidence to determine valued *tradition* and *security* more than any other group and were primarily very conservative. Those who starkly believed climate change was not happening had the lowest value scores for each value but valued *security* the most and were primarily very conservative.

Table 1

Values & Demographics of Each Perception Group (N = 486)

Cause	Values								Demographics		
	Power	Achievement	Hedonism	Self-direction	Universalism	Benevolence	Tradition	Security	Political Ideology	Age (avg.)	n
Natural	5.2	5.6	4.5	6	5	6.5	6.4	6.8	33.3% VC	47	99
Mostly											
Human	4.7	5.5	5.1	6.7	6.7	7.2	6	6.8	38.2% M	43	144
Equal	4.5	5.6	4.6	6.5	6.3	7.1	6.6	6.9	42.9% M	46	163
Not Enough											
Evidence	4.4	5.2	3.9	6.1	5.9	7.0	6.9	7.4	32.5% VC	52	40
Not											
Happening	3.8	4.8	4.2	6	4.2	5.6	5.6	6.7	42.5% VC	50	40

Note. VC = very conservative, M = moderate

Conclusions/ Implications/ Recommendations

Understanding how segments of a population perceive the cause of climate change allows practitioners to strategically address these consequential misperceptions or avoid altogether areas like cause that may bristle audience members in certain groups but not in others (Van der Linden et al., 2019). Pairing this insight with the values each group hold provides even more potential for social marketing through value-congruent messaging (Fischer et al., 2020). For skeptical audiences, that might look like avoiding discussing the cause of climate change and instead focusing on the values skeptical audience members tend to hold—in this case, *security*. There is much potential for research in this area, including experimentally testing messages on audience segments and investigating which other variables are influential for message processing.

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