

Understanding of Global Climate Change: Beliefs vs. Actions

Introduction

Stephen B. Broomell*, David V. Budescu**, and Han Hui Por**

Results

We investigated the public’s attitudes towards global climate change. Previous research has distinguished between two main response variables:

- Belief in global climate change
 - Measured as belief in 3 °F increase in global temp. in 50 years
- Intentions to act
 - Measured as agreement to perform 5 different energy reduction tasks
- Intentions to act were harder to predict (Bord, O’Connor, and Fisher, 2002)

Goals

- Replicate the belief – action distinction
- Incorporate more measures to increase predictability of intention to act
- Identify the dominant predictors of actions and beliefs

Method

- 456 residents of the University of Illinois community were surveyed on their attitudes toward global climate change
- Each participant responded to 8 scales. Responses were made on 5-point scales ranging from “Strongly Disagree” to “Strongly Agree”

Description of Scales

Inventories that measure attitudes to various aspects of climate change. Each scale is described below and a sample item is provided:

- Revised New Ecological Paradigm (RNEP)** - Measures an overall general concern for environmental factors
 - We are approaching the limit of the number of people the earth can support.
- Belief in Global Climate Change(BGCC)** – Measures belief in the existence of global warming
 - I am quite sure that global warming is occurring now.

*College of Information Sciences and Technology
Pennsylvania State University, University Park, PA 16801

**Department of Psychology
Fordham University, The Bronx, NY 10458

Description of Scales

- Personal Experience (PE)**
 - I have already noticed some signs of global warming
- Perception of Causes (PCA)**
 - The main causes of global warming are human activities.
- Perception of Consequences (PCO)**
 - Global warming will bring about some serious negative consequences.
- Self Efficacy (SE)** - Measures the belief that the one’s own behavior has an impact
 - I believe that little things we can do will make a difference to alleviate the negative effects of global warming.
- Intention to Act (IA)**
 - I plan to take some actions to stop global warming.
- Free Market System (FMS)** – Measures strength of belief in the free market system
 - The preservation of the free-market system is more important than localized environmental concerns.

Scale Summary

Scale	Mean (SD)	Reliability
BGCC	4.32 (0.92)	0.91
SE	4.09 (0.77)	0.80
IA	4.00 (0.90)	0.93
PCO	3.98 (0.76)	0.82
PCA	3.97 (1.02)	0.92
PE	3.87 (0.98)	0.84
RNEP	3.62 (0.61)	0.82
FMS	2.33 (0.66)	0.70

General Dominance Analysis

Belief in GCC	Predictor	Intention to Act
0.14	Percept. of Causes	0.07
0.10	Percept. of Consequences	0.06
0.08	RNEP	0.08
0.21	Personal Experience	0.05
0.04	Self Efficacy	0.14
0.03	Free-market system	0.04
-	Belief in GCC	0.05
0.61	Total R^2	0.49

Discussion

- Belief vs. Action
 - We confirm the distinction between beliefs in GCC and intentions to act.
 - We find 2 distinct constructs that share about 22% common variance (r=0.47), with partially overlapping predictors.
- One should consider the goal of communication
 - To generate action?
 - Intentions to act may be formed somewhat independently of from beliefs in GCC
 - To generate belief?
 - Beliefs in GCC may be easier to understand/model

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Results

