



ELSEVIER

Contents lists available at ScienceDirect

The Social Science Journal

journal homepage: www.elsevier.com/locate/soscij



Attitude–behavior consistency in household water consumption



Erika Allen Wolters*

Oregon State University, 301 Gilkey Hall, Corvallis, OR 97331-6206, USA

ARTICLE INFO

Article history:

Received 27 December 2012

Received in revised form 2 October 2013

Accepted 2 October 2013

Available online 2 November 2013

Keywords:

Attitude–behavior consistency

Water conservation behavior

New Environmental Paradigm (NEP)

Oregon water policy

ABSTRACT

The purpose of this paper is to examine how environmental attitudes and concern about water scarcity translate into water conservation behavior. The study considers whether Oregonians environmental concern measured by the New Environmental Paradigm scale and sociodemographic characteristics influence personal water conservation activities. Using a survey conducted in the spring of 2010 of Oregon residents, the interaction of environmental concern and sociodemographics that predict identified water conservation behaviors are considered.

© 2013 Western Social Science Association. Published by Elsevier Inc. All rights reserved.

1. Introduction

In the Western United States, water is a highly sought after, scarce resource. With both climate change and population growth affecting the availability and demand for more water, Western states are scrambling to find reliable sources of water to meet their growing, changing needs. Water is a finite resource, with only about three percent of water on the earth freshwater, and only a portion of that percent available for human use (the rest is held in snowpack and glaciers) (Feldman, 2012). It is estimated that an individual in the western world directly or indirectly consumes roughly 1500 and 2000 tons of water per year (Pearce, 2006), consumption that impacts both local regions as well as the hydrology of regions throughout the world (Pearce, 2006). Therefore, conservation may well be one of the most important ways to manage water for future use.

Oregon has a reputation for being an environmentally progressive state. In 2007, Forbes Magazine listed

Oregon as No. 2 in “America’s Greenest States” (Wingfield & Marcus, 2007). Based on this reputation, one might infer that the average Oregonian is aware of environmental issues facing the state and seek to mollify problems with personal conservation behaviors. Given that Oregon has a strong environmental reputation and been a trendsetter with environmental policies, this paper explores water conservation behaviors of the public, and whether their behaviors are the result of environmental concern. It will assess the role of sociodemographics, and environmental concern in context of environmental water conservation behaviors of Oregonians. Further, the paper examines whether residents’ understanding of the problems facing Oregon’s water supply translates into water conservation behaviors.

2. Background and justification for research

2.1. Oregon’s changing water supply

Water is a finite resource, and the State of Oregon is already struggling to meet the growing demand for water, particularly in the summer months (Oregon Water

* Tel.: +1 5417371421.

E-mail address: Erika.Wolters@oregonstate.edu

Resources Department, 2011). Future challenges to water supply in Oregon, specifically climate change and population growth, will stress an already over-taxed water supply. Surface waters, that provide 85 percent of water use for the state (Bastasch, 2006), can no longer meet water demand, with groundwater now being tapped to fill the void. However, the increased pressure on groundwater resources to supplement deficiencies in surface water creates its own set of problems like difficulties managing conjunctive uses, declining aquifers, and administrative restrictions on certain areas (Oregon Water Resources Department, 2011). Thus, as water becomes less readily available and predictable due to climate change and population in Oregon continues to grow, Oregon's already stressed water supply will have added pressure to meet demand. Therefore, Oregonians use of water and how they perceive and value water as a resource will directly impact the ability of Oregon to meet water demand.

2.2. Environmental concern and behavior

According to Fishbein and Ajzen's (1975) theory of reasoned action (TRA), the strength of a behavioral intention can predict the performance of the act itself. However several factors can influence intention such as attitudes, social norms, knowledge, economic conditions, and so forth. In order to test whether environmental concern influences decisions to engage in environmental behaviors, concern must first be assessed.¹

One way to assess environmental concern is through the New Environmental Paradigm (NEP) scale devised by Dunlap and Van Liere (1978). Until the 1960s–1970s the dominant social paradigm (DSP) was identified as the leading worldview. The DSP represents a more utilitarian worldview with the main tenets of individualism, growth and progress, a faith in science and technology, and free market economics (Smith, 1995). Research finds that individuals subscribing to the DSP demonstrate lower levels of ecological concern (Smith, 1995). In contrast, the NEP represents a worldview more align with preservationist attitudes; concern for environmental protection, a belief that nature has the right to exist regardless of human benefit, and a generally biocentric orientation (Steel, 1997). Respondents showing endorsement of the NEP are therefore thought to have a more pro-environmental orientation (Dunlap, Van Liere, Mertig, & Jones, 2000).

While the theory of reasoned action does not claim that attitudes influence behavior, "they influence behavioral intentions which in turn shape our actions" (Kollmuss & Agyeman, 2002). Accordingly, a pro-NEP environmental attitude should predispose people to environmental behaviors. Researchers have found evidence supporting the connection between environmental concern and the predisposition to perform conservation activities (Nooney, Woodrum, Hoban, & Clifford, 2003; Steel, 1996).

Other studies have found that environmental concern directly leads to more participation in water conservation (Gilg & Barr, 2006; Trumbo & O'Keefe, 2001; Willis, Stewart, Panuwatwanich, Williams, & Hollingsworth, 2011). A study by Gilg and Barr (2006) explored how commitment to environmentalism influenced water conservation activities, finding that the more committed the environmentalist, the more likely they will participate in water conservation. Willis et al. (2011) conducted a study of water use in Gold Coast city, Australia and found that "residents with very positive environmental and water conservation attitudes consumed significantly less water in total. . ." (Willis et al., 2011). Australia is certainly more water scarce than Oregon, however the concept remains the same: if people value water, then water conservation will become a priority (Willis et al., 2011).

Lastly, the degree of uncertainty about potential outcomes of ecological problems also impacts willingness and desire to act (Kortenkamp & Moore, 2006). Essentially, the higher the ecological certainty of a problem, the greater willingness to participate in conservation behaviors to mitigate that problem (Kortenkamp & Moore, 2006).

2.3. Sociodemographic factors

Sociodemographic factors may also play a role in environmental behaviors such as water conservation. Studies have consistently demonstrated that younger (Arcury, 1990; Dietz, Stern, & Guagnano, 1998; Dunlap et al., 2000; Jones & Dunlap, 1992), and higher educated (Honold, 1981; Howell & Laska, 1992; Jones & Dunlap, 1992; Van Liere & Dunlap, 1980) individuals express deeper concerns for the environment.

However, other sociodemographic attributes such as place of residence (rural vs. urban), income, and gender are less definitive in their influence on environmental concern. Many researchers find that the distinction between rural and urban residence in their level of environmental concern has been overstated, and that other personal factors more strongly influence concern than the actual place of residence (Jones & Dunlap, 1992; Salka, 2001; Van Liere & Dunlap, 1980). One factor coinciding with rural residency is employment in resource extracting industries or land intensive industries such as agriculture. The supposition is that lower levels of environmental concern among some rural residents has more to do with economic dependence on land- or resource-use industries than place of residence, since environmental policies could negatively impact their financial livelihood (Freudenburg, 1991; Salka, 2001; Tremblay & Dunlap, 1978). Other researchers find that this rural-urban divide is overstated, and that even when resource dependency is considered there are too many other factors and diversity in rural communities to simply use residency as a variable in level of environmental concern (Bennett & McBeth, 1998; Brunson, Shindler, & Steel, 1997).

Isolating income from other socio-economic variables to measure environmental concern also has mixed research results. While some research indicates a strong relationship between income and environmental concern (Arcury, 1990), other studies find that it is an inconsistent predictor

¹ Environmental concern is operationalized in this paper to refer to general attitudes and beliefs about the environment. Therefore, concern, attitudes and beliefs will be used interchangeably throughout the paper.

Download English Version:

<https://daneshyari.com/en/article/139998>

Download Persian Version:

<https://daneshyari.com/article/139998>

[Daneshyari.com](https://daneshyari.com)