The Effects of Socioeconomic Status on Intent to Conserve Water



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Introduction

- Water is arguably the most important resource for promoting and maintaining life.
- Daily hydration, bathing, and cooking are all fueled by water.
- Water is an essential part of one's daily life.
- For much of the world, however, access to clean and plentiful water resources is a privilege.
- Water scarcity is a global issue that is increasing in scale and intensity as climate change and political strife are exacerbated.
- The issue of water scarcity challenges are unequally distributed across different communities in the United States (U.S.)
- More impoverished areas experience a greater impact when water conservation strategies are not employed.
- It is important to understand the ways in which socioeconomic status influences United States residents' ability to engage in water conservation activities.
- Understanding the relationship between socioeconomic status and water conservation behaviors will help water conservationists, political leaders, and scientists be more successful in creating inclusive and effective communication regarding water scarcity and conservation.

Objectives

This study addressed the following research objectives using audience segmentation as a framework:

- 1. Describe respondents' income level, education level, and self reported intent to engage in at-home water conservation efforts.
- 2. Determine if income level and education level predicted respondents' self reported intent to engage in at-home water conservation efforts.

Methodology

- An online survey was given to 1,049 U.S. residents 18 years old or older using non-probability opt-in sampling via Qualtrics.
 - Respondents answered demographic questions.
 - To indicate their intent to conserve water, respondents answered eight questions measured using a Likert scale. The responses were then averaged to create an overall scale.
- Descriptive statistics and regression analysis were conducted via SPSS software.

Demographic Information

- More than half of the respondents had at least a 2-year college degree (59.2%).
- More than half had an annual family income of less than \$75,000 (61%).

Results

 Mean intent to conserve water was undecided or likely (M = 3.57, SD = .80).

	Unstandardized B	Tolerance	VIF
Family Income < \$24,999	-0.304***	0.583	1.714
\$25,000 - \$49,999	-0.046	0.584	1.713
\$50,000 - \$74,999	-0.143	0.641	1.559
\$150,000 – \$249,999	0.150	0.757	1.322
Family Income > 250,000	0.157	0.815	1.228
Less than High School Diploma	-0.389*	0.923	1.083
High School Diploma	-0.182*	0.616	1.623
Some college	-0.156*	0.659	1.517
2 Year College Degree	0.039	0.759	1.317
Graduate Degree	0.254***	0.602	1.662

Note: *p < 0.05, ** p < 0.01, *** p < 0.001

Results Continued

Socioeconomic status was found to significantly predict 11% of variance in respondents' intention to conserve water. (F=12.78, p<0.001)

Income level was a significant predictor of intent to conserve water.

• Respondents with an income level less than \$24,999 showed a decreased intent to conserve when compared to the \$75,000 - \$149,999 family income level.

Education level was a significant predictor of respondents' intent to conserve water.

- Respondents with less than a high school diploma and some college education are less than likely to engage in water conservation when compared to respondents with a 4year college degree.
- Respondents with a graduate/professional degree are more likely to engage in water conservation when compared to respondents with a 4-year college degree

Conclusion

Socioeconomic status is an important predictor of intent to conserve water. Socioeconomic status should be considered when developing community water conservation strategies.

Communicators should concentrate messages on groups that have the capacity and room to improve engagement in water conservation, namely those with less than a high school diploma, a high school diploma, and some college education. Communicators should create messages that are free of scientific jargon to be accessible to those with less education.