

# A Comparative Analysis on Attitudes Toward Drinking Water Quality between Utah and the Nation

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## I. Introduction

- Utah faces an impending water crisis due to dry conditions, reduced snowpack and streamflow, and substantial population growth over the next three decades.<sup>1,2</sup>
- Considering public support is the catalyst for government action, understanding the attitudes and beliefs of Utah citizens is integral to policy implementation.
- This research compares Utahns' perceptions of drinking water quality with those of Americans more generally to better understand whether an effort for increase public awareness is warranted. (We do not have any policy-related measures—any policy implications that result from this work is merely that, implications, not direct measurements of opinion about policy.)
- The insights presented will aid in Utah's efforts to create more effective water policy and guide further research into public awareness of water related issues.

## II. Methods

- Combined data from existing iUTAH surveys along the Wasatch Front was used as the Utah sample.<sup>3,4</sup>
- The national sample was obtained through secondary data from the Inter-Consortium for Political and Social Research (ICPSR).<sup>5</sup>
- Questions designed to measure perceived drinking water quality was comparable between the Utah and national datasets.
- Gender, age, and education were used as predictors of attitudes toward drinking water quality. Gender was measured dichotomously (0 = "Female," 1 = "Male"). Age was measured on a continuous scale ("18 to 99"), while education was a category selection of 4 ordinal options ("Some high school" up to "Graduate degree").
- We conducted two ordinary least squares (OLS) regression models and compared the results that followed to analyze the attitudes of Utahns and Americans more broadly.

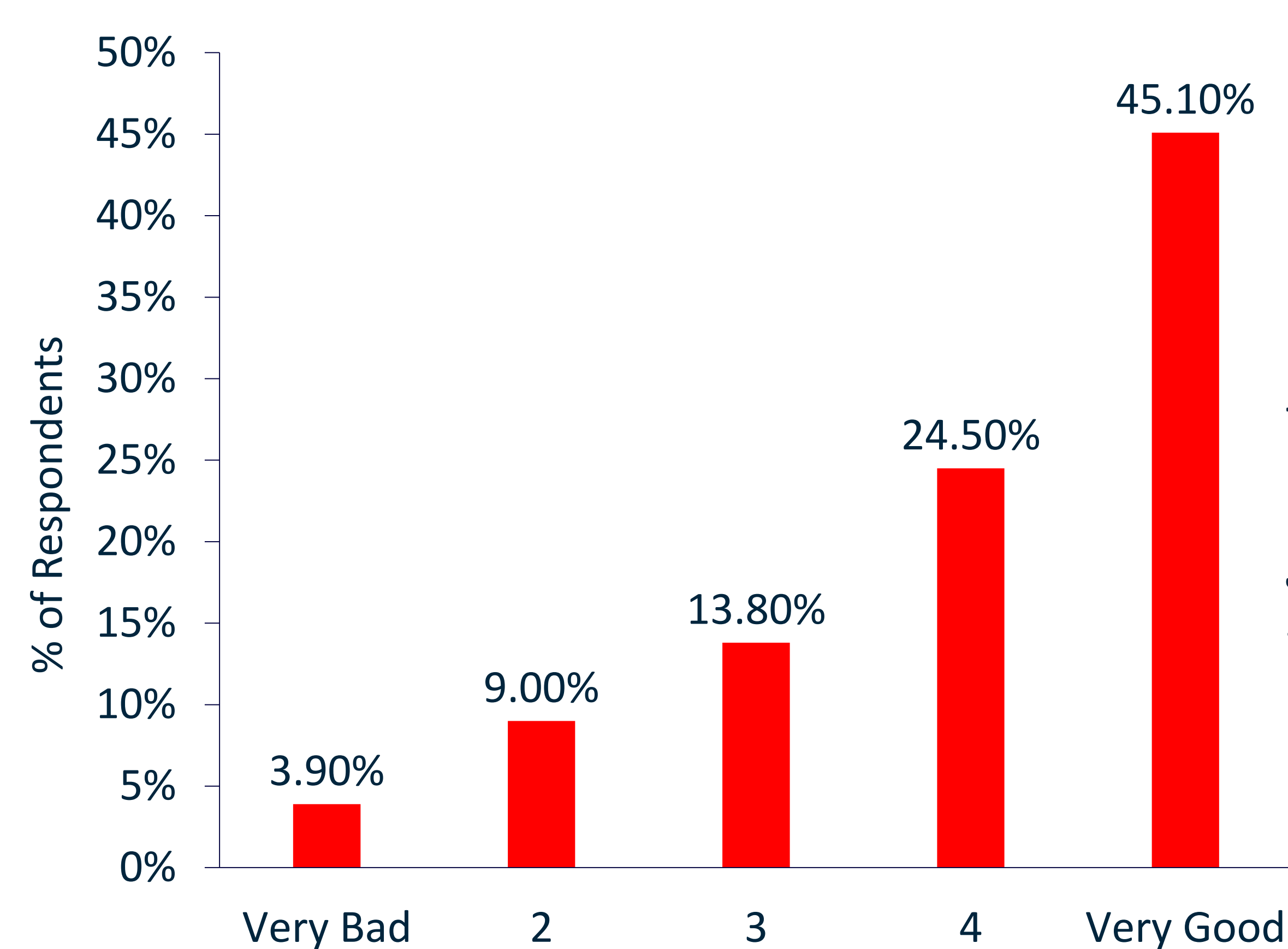


Figure 1. Perceived drinking water quality among Utah citizens (N = 5,777).

Table 1: Linear Regression Analyses of Perceived Drinking Water Quality with Demographic Variables\*

VARIABLES	Utah (N=5691) B (SE)	Nation (N=1349) B (SE)
Gender (male = high)	-.147 (.026)**	-.187 (.053)**
Age	.076 (.009)**	.094 (.019)**
Education	.105 (.014)**	.124 (.024)**
R <sup>2</sup> %	3.3%	4.4%

\*Note. 'Utah' and 'Nation' are two separate data sets and were calculated independently of one another.

\*\*p<.001

## III. Results

- Taken together, age, gender, and education explained 3.3% and 4.4% of the variance in perceived drinking water quality among Utahns and Americans, respectively.
- Gender negatively predicted perceived drinking water quality. Women were more likely than men to perceive drinking water to be of lower quality.
- Age and education positively predicted perceived drinking water quality. Older respondents and those who were more educated were more likely to perceived better quality drinking water.

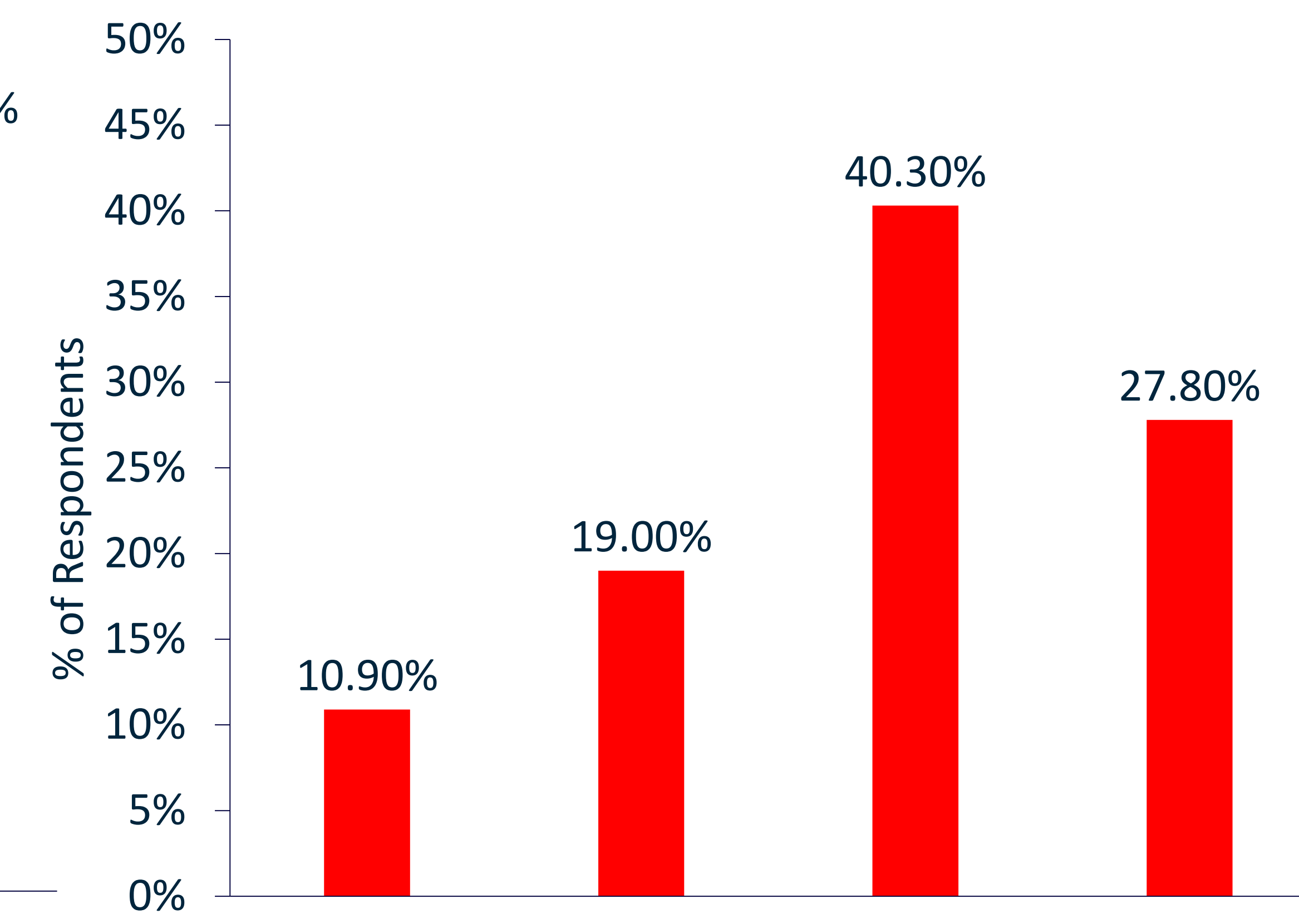


Figure 2. Perceived drinking water quality among the nation (N = 1,349).

## IV. Conclusions

- This research demonstrates that demographics predict Utahns' and Americans' perceptions drinking water quality in similar ways.
- In general, there is a tendency for white males to perceive less risk than women and minorities, known as the "white male" effect.<sup>6</sup> This may be a potential explanation for why they perceive their drinking water to be of higher quality in this study.
- From a policy perspective, Utah citizens are not more concerned about the quality of their drinking water compared to the nation. This implies that, even in our desert environment, water issues are not a primary concern for Utahns. Given the environmental complications Utah faces, it may be important to raise awareness of water issues in the state.

## V. References

- Bateman, M. (2014, September). Flowing toward 2050: Utah's Water Outlook. Retrieved June 6, 2016, from <http://www.utahfoundation.org/uploads/rr723.pdf>
- Climate Tables | Western Regional Climate Center. (n.d.). Retrieved June 6, 2016, from <http://www.wrcc.dri.edu/climatedata/tables/>
- Endter-Wada, J., Hall, A., Jackson-Smith, D., & Flint, C. (2015, July). Utah's Water Future: Perspectives on Water Issues in Utah's Wasatch Range Metropolitan Area. Retrieved June 21, 2016, from <http://data.iutahepscor.org/mdf/reports/SummaryReport-iUTAH2014HouseholdSurvey.pdf>
- iUTAH. (n.d.). UTAH WATER SURVEY: Perceptions and Concerns about Water Issues - The Utah Water Survey Overview and Methods V5.pdf - iUTAH. Retrieved May 18, 2016, from [http://repository.iutahepscor.org/dataset/utah-water-survey-perceptions-and-concerns-about-water-issues/resource/a00e863e-291b-4cf2-bf35-6c67c5c6442c?inner\\_span=True](http://repository.iutahepscor.org/dataset/utah-water-survey-perceptions-and-concerns-about-water-issues/resource/a00e863e-291b-4cf2-bf35-6c67c5c6442c?inner_span=True)
- CBS News, & New York Times. (2012). CBS News/New York Times National Survey, March #1, 2011: Version 1. Retrieved from <http://www.icpsr.umich.edu/ICPSR/studies/33487/version/1>
- Finucane, M. L., Slovic, P., Mertz, C. K., Flynn, J., & Satterfield, T. A. (2000). Gender, race, and perceived risk: The "white male" effect. *Health, Risk & Society*, 2(2), 159–172. <https://doi.org/10.1080/713670162>



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