

Public awareness of and attitudes towards water use and its conservation

James Jenkins and Joshua Ward

School of Life Sciences, University of Hertfordshire.

E-mail: j.o.Jenkins@herts.ac.uk



Introduction

- Understanding how the public views water use and its conservation is crucial to the effective management of water resources.
- Behaviour change is playing an ever greater role in the management of water resources
- DEFRA's vision for the future 2030 targets increased consumer knowledge of household water use; the promotion of more sustainable behaviours; and a new average daily consumption figure of 130 litres per person per day (DEFRA, 2008a; DEFRA, 2008b).
- Attitudes and awareness to water use shift over time
- More often than not research is limited by geographical location
- Study aims to update and enhance our knowledge and understandings as well as expanding the geographical context upon which from such understandings emerge, particularly in the county of Buckinghamshire in the United Kingdom

Methodology

- Qualitative approach adopted
 - implemented through the administration of a questionnaire to individuals over the age of 18 living in the county of Buckinghamshire. Questionnaires were administered to individuals in the key population centres of Aylesbury, Milton Keynes and High Wycombe. 20 questionnaires were administered in each location.
- Questionnaires were administered to 60 members of the general public
 - most common age groups were 18-30 and 51-60 year olds
 - previous research by Consumer Council for Water identified 18-30 age group as a priority group for further research
- Questionnaire split into three sections.
 - First section – focused on gender, age, household size, tenure, engagement with environmental issues, and awareness of water use and its conservation as an issue.
 - Second section – focused on exploring respondent's awareness of water use and saving measures.
 - Third section – focused on water use behaviour in the household, the willingness to change that behaviour, perceptions of water sufficiency in UK, and importance of water use in relation to other environmental issues

Results and Discussion

■ Impact of gender and household size

- In a 2015 by CCW, young males were identified as a priority group for awareness campaigns. Study results support this finding.
 - twice as many females than males were interested in learning more about personal water consumption, but with equal numbers in each group feeling they could save more.

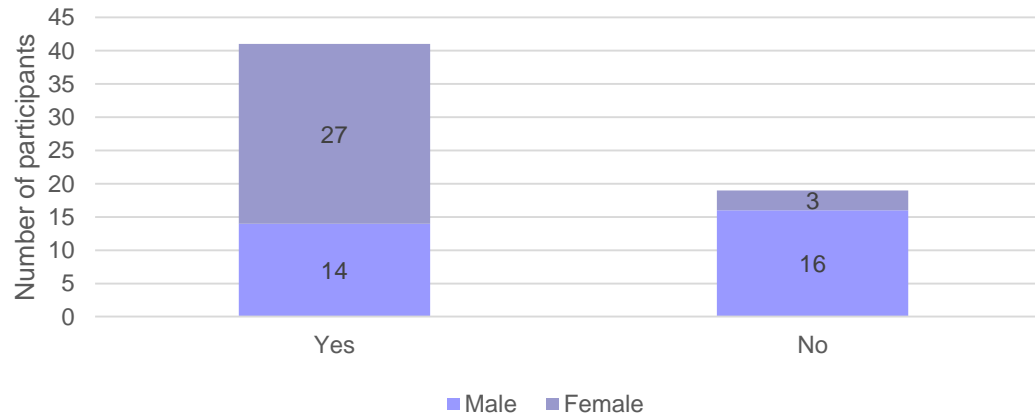


Fig. 1. Interest in learning more about personal water consumption

- Household size was found not to have an impact on responses. This counters previous research in Australia and South Korea by Willis *et al.* (2009) and Lee, Park and Jeong (2012) respectively. Therefore, findings underscore need to ensure research takes place in many national and geographical contexts.

■ Impact of tenure on water use

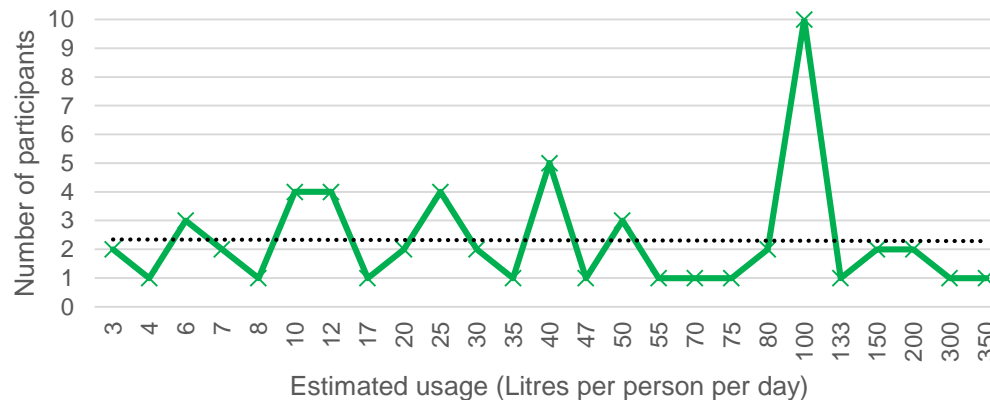
- Found that tenure didn't impact attitudes - counter-intuitive?
- However, in relation to application of water saving devices there was a difference e.g. Water butts - 'owned outright' (59.1%) and 'owned mortgage' properties (50%), rented properties (13.3%)

■ Knowledge and uptake of water saving technologies and devices

- 36.7% of participants were found to be unaware of internal water-saving technologies in their household – water audit to educate in both directions
- 30% of participants thought they didn't have them in their home, and had never considered installation. One participant explicitly concluded that they had “*never heard of them*”.
- water power was more important than time spent showering, and this could be important when trying to reduce water consumption
- improving the uptake and fitting of water butts, as 70% of participants never used one

■ Public awareness and understandings of water use

- participants knew where they consumed the most water, but had little idea of actual consumption rates
- actual water consumption showed no consensus in responses, and many estimates were surprisingly low



- found that 45% of participants responded that advice from family or friends would affect their behaviour



- **Water meter engagement**

- found that 83.3% of participants either didn't have or had never checked their water meter

- **Public awareness of water use and water conservation**

- 30% of respondents were found to never have encountered the topics of water use and water conservation prior to this study
- 31.6% of participants indicated that they were currently concerned about water use and water conservation
- 41.7% believed information on water usage was inaccessible
- 71.6% of participants open to the idea of changing water use behaviour.
- 21.7% of participants believed they could do 'a lot more' to save water, 55% 'some more' and 20% 'a little more'



■ **Financial disincentives and behaviour**

- financial constraint was considered the greatest motivator for reducing consumption
- 21.7% strongly agreed and 46.6% agreed that increasing water bills would increase awareness of water consumption

■ **Water, the poor relative!**

- 41.7% of participants believed the UK had more important environmental issues than water to address, and a further 36.7% were undecided.
- Many participants were found to be more concerned about their energy consumption, believing energy efficiency was easier to achieve than water efficiency
- Passive technologies are currently at risk of being undervalued - 36.7% of participants without (or unaware of) internal water-saving technologies.

Key Conclusions

- Water Act (2014) identified clear communication from water providers as being central to efforts to increase household water efficiency.
- Study highlights that 'awareness' rather than simply 'attitudes' is a barrier to improving household water efficiency
 - awareness campaigns should be enhanced, and concentrate on water use to enhance public understandings. *Interactions need to become more playful and engaging.*
 - Suggested that more effective targeted educational campaigns are introduced e.g. development of EU water label and other similar information schemes should be explored to help better inform and raise awareness levels of public
 - caution should be exercised when applying international research to the UK. Economic, climatic and demographic differences may hinder the applicability of research.