



Attitudes, Behaviour, and Engagement Toward Water Consumption and Conservation in a Higher Education Setting

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Introduction

- In the UK, water stress has tended to be viewed as being a problem not of ours but of others
- Attitudes and behaviour toward water usage can vary from person to person, from community to community, from business to business, and from one point in time to another
- Education is viewed as being key to changing behaviour, particularly amongst younger age groups due to the belief that pro-environmental behaviours can be embedded more effectively in such groups
- Finlay and Massey (2012) suggest that universities are important transformation centres with regard to being drivers for social change. They can act as key places within which to address global issue and facilitate change
- Previous research by Jennet *et al.* (2016) highlights that approaches that seek to change attitudes and behaviours to promote pro-environmental behaviours, using methods such as leaflets, websites or social media don't promote engagement (see also Froehlich *et al.*, 2010; Owens & Driffill, 2008).

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- Work done by Jannett *et al.* (2016) suggests that interactivity is key in encouraging more candidates to partake in a questionnaire and to actively think about their behaviour.
 - Paper / presentation presents the findings of a small-scale research project that sought to playfully engage participants in an exploration of their attitudes and behaviour toward water use in a university setting.

Methodology

- Interactive questionnaire was designed whereby participants were encouraged to give their answers by placing counters in buckets of differently coloured water



- Buckets were used to answer the questions in a multiple-choice format. Different coloured counters were used to differentiate between the genders first (before they were given a fact) and second answers (after they were given a fact).
- One question per day was asked with a view to enhancing engagement with study to keep it as simple and as quick as possible to engage with.
- The questionnaire consisted of asking a question, and then providing an attitude changing fact before asking the question again.
 - The reason why the participant did or did not change their answer was also asked.

<i>Day</i>	<i>Question</i>	<i>Influencing fact</i>	<i>Image associated with the fact</i>
1	<p>How much water on average do you think a person uses in the UK per day?</p> <p>a)10 litres b)50 litres c)100 litres</p> <p>Follow up question - Does this encourage you to do more to save water? (Yes or No)</p>	<p>On average, every person in the UK uses 200 filled water bottles– like the one displayed (150 litres) of water per day and this number has been increasing annually by 1% since the 1930's and this number can be cut by a third if water saving devices were used. (Waterwise, 2016).</p>	<p>A pile of many used and disposed plastic bottles.</p>

Results and Discussion

Water usage awareness and potential behaviour change

- Found that students identifying themselves as female (17) were more accurate about their water usage compared to students identifying themselves as male (8)
- Upon being provided with information on average usage, 61 out of the 76, said they were encouraged to save water.
 - The small number of male and female students that said 'no', were confined to the age groups 18-24 and 25-34
- Males and females were found to be equally happy to adopt water conservational practices

'it's a lot of water to use and waste'

- In relation to the security of the water resources in the UK, it was found that following the the provision of information, the number of participants that said 'yes' the first time was halved

'We need to conserve for future generations'

and

'if population is increasing, we should be more careful'

Awareness of retrofit programmes

- It was found that participants were unaware of the retrofit programmes provided by Thames and Affinity water (see Figure 3.12). This suggests that educational programmes provided by water companies have not encouraged the use of water saving devices
- Found that many would consider adopting water retrofits in their homes even before they were given the fact

“to save money and water”


and

“it’s a precious resource, we need to save it”



Facts and interactivity

- Found that for three out of the four questions that were asked that there was a significant difference between the two responses given by the participants
- Information prompt suggests that binding communication is key to facilitating attitude change.
- Observed that students would come back on consecutive days with colleagues to learn a new fact while remembering facts given on previous days.



Key Findings & Conclusions

- Found that students identifying themselves as female were more aware of their water usage than those identifying themselves as male
- Found that students were unaware of retrofit programmes but were willing to consider them after information about benefits
- Results from this project were significant as they found that attitudes and behaviours can be changed in a higher educational setting if the way of presenting facts and interacting with the consumers is made memorable
- Interactivity combined with factual information has the potential to alter individual's attitudes and behaviours