Faculty of Humanities & Social Sciences

UNIVERSITY OF BATH

Exploring the Utility of Social Norms in a Private Setting: Examining On-Campus Shower Behaviour

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Introduction

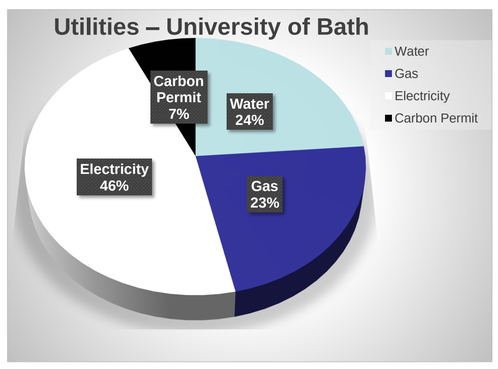
Background
University of Bath – committed to carbon footprint reduction of the campus.

Despite various measures, **more can be done on an individual level.**

Water consumption - almost one quarter of the University's utilities annually - area of focus.

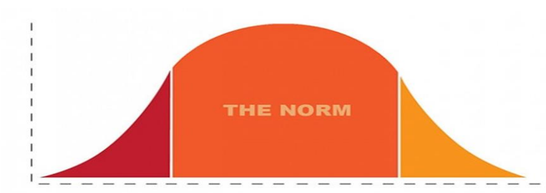
Showering - approximately one third of daily direct water consumption.

Target behaviour – showering



Social norms interventions - robust and reliable behaviour change mechanisms (e.g., Berkowitz, 2005).

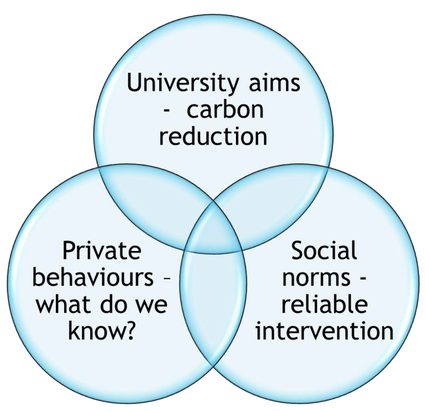
Provide information about what the **common behaviour** is in a given context (Breckler, Olson & Wiggins, 2005).



As showering is a **private behaviour,** it has been previously unknown as to whether social norms are useful in this context.

Exploratory analysis indicated that for behaviours which are deemed as private, we are inaccurate in our perceptions of what is 'normal'.

Threefold background of study



Method

Participants. 85 undergraduate students with a mean age of 18.73 years, residing on-campus.

Materials. Perceptions on showering behaviour questionnaire.

New Ecological Paradigm (NEP: Dunlap & Van Liere, 2000) a measure of environmental concern.

Procedure. Participants were asked to record their individual shower time using data logging devices. They were not told the true purpose of the study.

After baseline data collection, participants were randomly assigned feedback advising that they were *X* minutes above or below 'the norm'. The feedback (Descriptive Norm) given did not relate to a specific norm but rather was generated using a random number generator.

Data was again collected post intervention. Participants were then asked to complete the measures and were fully debriefed as to the purpose of the study.

Results

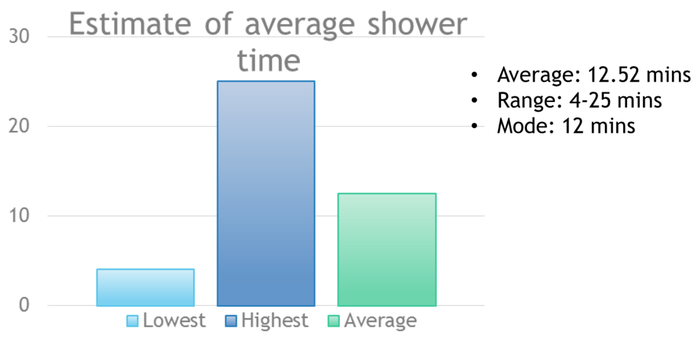
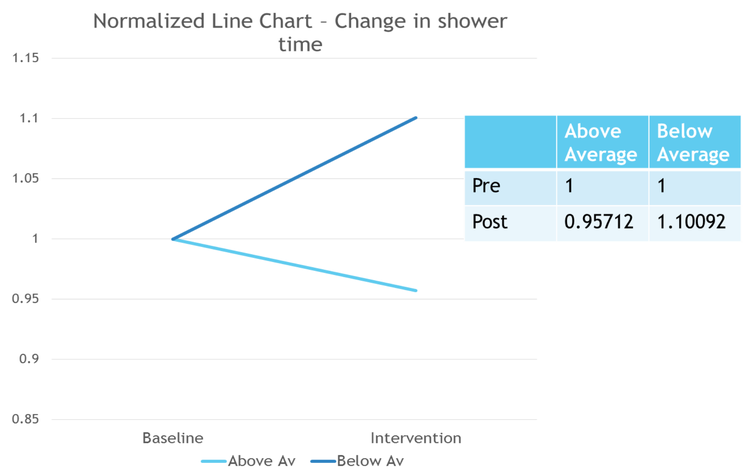


Figure 1. Average shower times estimated as being between 4 and 25 minutes with a mode of 12 minutes

	Positive Feedback (Above Average) - Minutes	Negative Feedback (Below Average) - Minutes
Pre-intervention	13.30	9.31
Post-intervention	12.65	10.16
Percentage change	-5%	9%

Table 1. Difference in shower time for both conditions



	Above Average	Below Average
Pre	1	1
Post	0.95712	1.10092

Figure 2. Normalised line chart of change in shower time

Participants told they were below average (negative feedback) increased shower time while those told they were above average (positive feedback) decreased their shower time.

Impact of Environmental Concern on Change in Shower Time

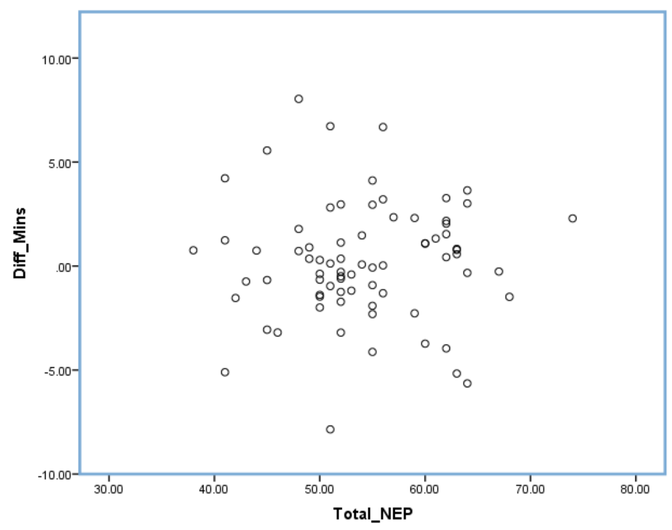


Figure 3. Scatterplot showing relationship between environmental concern and change in behaviour

There was no impact of environmental concern on shower time, (p= 0.846), indicating this did not effect behaviour

Discussion

Participants changed their behaviour in line with the bogus norm they were given in both conditions.

The change in shower time was significant for both groups (p<0.005).

Potential utility for social norms and pro-environmental behaviour change.

This change in behaviour found here was **not** as a result of environmental concern suggesting it was solely as a result of the social norm.

Pro-environmental behaviour change can occur with the use of social norms interventions in the absence of environmental values and conscious engagement in pro-environmental behaviour.

Conclusion

Social norms - key to the development of interventions targeting pro-environmental behaviour **in the absence of environmental concern.**

We can now focus on a more **broad norm** which can effectively change behaviour without consciously subscribing to an environmental behaviour.

Future research must focus on effectively presenting normative messages in a manner which avoids a boomerang effect and increasing any undesirable behaviours.

References

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