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Intervention

1) What are the challenges and the key insights Social Practice Theories (SPT) offers?

With targets to reduce water use to below 110 litres per person per day by 2050 (Environment Agency, 2020), there are calls for new methods and ideas to support innovations in behaviour change. SPT extend beyond traditional 'behavioural' approaches, exploring how interventions might engage with the wider personal, social, material and political contexts of everyday life which shapes practices to support deep and lasting changes in water use.

SPT reframe intervention (Hoolohan & Browne, 2016, 2020), shifting attention away from individual values towards a more diverse collection of elements including product, appliance, home and infrastructure design, norms around work and family life, and societal developments like hyper-cleanliness and consumerism (Browne, 2015; Browne et al., 2013). Crucially, social practice research shows that all aspects of water use are dynamic - they have changed, and will continue to change, over time. Therefore, all are sites for intervention.

2) What is the key study and what does it show?

Key developments in this field include the Change Points toolkit (Watson et al., 2020), designed by academics from The University of Manchester and Sheffield University in collaboration with the water industry (Waterwise, Northumbrian Water, Anglian Water, Defra). Building on a wide base of practice-oriented research, Change Points prioritises three key ideas:

Connection within and between practices: Water-using practices, like showering or dishwashing, are observable instances of water use where we might look to monitor the impact of an intervention, but this does not necessarily make them the best place to target an intervention. Instead, we need to understand how any act of water use is connected to our actions in different moments and places, and the actions of other people. For example, our 'need' to shower relates to our various work and leisure commitments, and how we travel. Recognising an instance of water use as part of a sequence of activities helps to identify opportunities for intervention, and can identify links to other policy concerns to enable joined up action.

Diversity: People's routines vary intensely. Yet, thanks to overarching influences such as work schedules, shared infrastructure and social norms, there are recognisable patterns of behaviour. For example, people who lead very active lifestyles are likely to use more water to freshen and clean their clothes and bodies.

For people with chronic illnesses or long-term injuries, water use may be incorporated in hygienic and therapeutic practices. Exploring diversity can help to identify possibilities for interventions (potentially with co-benefits), or limit negative impacts on vulnerable groups.

Distributed agency: Individuals are not the only people who have the capacity to alter everyday action. Their actions, both in the moment of water use, and throughout the course of a day/week/year, are affected by practices of many others. Product manufacture, lifestyle marketing, fashion, home design, urban planning, infrastructure design, employers, media etc. practices in these fields each shape how, when, how often and how much water is used within a person's home. Without engaging with the wider constellation of actors involved in these practices, intervention overlooks vital complexity and instead relies upon individuals making changes in their lives that run contrary to wider societal developments (Browne et al. 2013).

These three ideas are designed to start different conversations about intervention planning, data collection and evaluation, helping water industry professionals to realise the limits and possibilities of their intervention programmes.

3) What does our Knowledge Transfer Partnership (KTP) primary research reveal?

Our primary research gathered specific insights on the variety of factors which influence and guide certain water using behaviours, showing how different forms of data can inform intervention design (building on Browne et al., 2013; Hoolohan & Browne, 2020; Pullinger et al., 2014).

This image, from a home tour, shows a well-groomed garden with rows of hanging baskets, a patio and flower beds. The participants, a couple, one retired, are keen gardeners and the garden is a place to 'relax' and 'connect with the outdoors'. It was clear their garden meant a great deal to them and was an important space for their wellbeing.

During the summer drought in 2022 the participants stopped watering their lawn to save water, having previously used a sprinkler. However, to maintain the rest of their garden, their watering regime involved a hosepipe to water their flower beds and give their hanging baskets a 'good soaking'.

Used as a design prompt, this data helps inspire creative thinking about intervention. For example, we might consider:

Shared expectations about what is normal and acceptable: how are these produced, sustained, and changed, and how do they shape peoples' everyday water use? Here the aesthetic standards and planting/watering regimes embodied in this garden are deeply entrenched, but not all people and gardens share them. How could we popularise alternatives that are more drought resistant?

Everyday routines: how do peoples' various ways of working, travelling, caring, exercising, and socialising etc. shape the location, timing and frequency of water use? Here, the garden, and watering the garden, are important leisure practices, we could consider how the same benefits - relaxation, pride, mastery - could be redirected to other, less water intensive activities.

Water infrastructures and materials: how do products, appliances and spaces define how water can be used, and restrict possibilities for alternatives? Here, the private garden is an obvious driver of water use, along with the plants within the garden that are poorly adapted to hot/dry summers. To consider the future of gardening in the UK, we might consider the role of communal gardens to reduce lawn space, and how hanging baskets could be redesigned.

To achieve any of these changes requires that we think about garden watering in the longer term, and not only the instance in which it occurs.

4) How could you plan to take these ideas forward in your work

Having collected different forms of data, the next step is to consider what this data can reveal of the mundane elements that hold current, intensive, water practices in place. You can begin by generating longlists of all the factors that contribute to the practice being observed. This offers a richer picture to inform intervention design and helps to identify previously unconsidered avenues for action. To identify coalitions that can help support new forms of intervention, the next step is to consider the wider range of actors - not only the water companies and their customers - that have agency to shape how water use is embedded. These two steps can be used to evaluate current plans and activities to look for blind spots, and ways to extend activities.

Focusing on particular activities (e.g. showering, garden watering, hot tub use) or issues (seasonal demand peaks, morning peakiness) helps to identify multiple strands of activity needed to better target initiatives. Sophisticated forms of monitoring and evaluation are also required as the attribution of water savings resulting from interventions such as these is difficult to isolate. Yet these systemic interventions are vital if we are to achieve sustainable domestic water consumption (Hoolohan and Browne, 2016).

References

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