Wales Centre for Public Policy
Canolfan Polisi Cyhoeddus Cymru

Wales recycling behaviour change programme

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May 2018

Paper overview

This short paper provides a response to the five questions provided by the Welsh Government, in which the aspiration is to develop a strategy for uplifting domestic recycling rates to 70% by 2020. I initially set out a research context of academic work within the field of waste and recycling. I then explore some of the key assumptions underpinning the background evidence, leading into a discussion of how agendas focused on individual and social understandings of change can work more closely together. Through the remainder of the paper, I respond directly to the five questions and I use insights from previous research funded by the Leverhulme Trust, DEFRA and Coca Cola Enterprises on household waste practices, emphasising the need to consider domestic settings and (place-based and online) communities as key to raising recycling rates.

Research context

Research on waste and recycling has broadly followed two trajectories within the social sciences, which are indicative of two underpinning traditions. Without doubt the most prominent has been the cognitivepsychological approach, in which behavioural models have been mobilised to understand a range of factors determining individual choices. Such models (e.g. the Theory of Planned Behaviour) have been extensively used to identify key variables influencing behaviours and to derive interventions (e.g. Schwartz, 1995; Tudor *et al*., 2011). More broadly, behavioural science has become a significant contributor to governmental decision-making, through the deployment of Nudge-based strategies (Thaler and Sunstein, 2008) and forms of social marketing (French *et al*., 2010). These combined approaches have sought to overcome the simplicity embodied in so many information-based campaigns, which assumes a simple 'deficit' in information can be 'filled-in' through invoking more awareness, leading to action (McKenzie-Mohr, 2000).

In many cases, these approaches tend to be focused on the role of individual decision-making and the role that particular interventions can play in changing individual decisions. Yet since the early 2000's, a second trajectory of social scientific research on waste has emphasised the social embeddedness of consumer culture and the need to upscale analyses to understand domestic contexts (e.g. the home, the household) and how 'waste' is socially constructed (Bulkeley and Gregson, 2009; Gregson *et al*., 2007; 2009). This becomes critical with food waste, where there are complex interactions that have developed over time concerning the following elements (to mention just a few) (Riley, 2008):

- purchasing practices and the growth of weekly shopping and supermarkets / online grocery purchases;
- changing understandings of cleanliness, hygiene and safety;
- changing aesthetics of kitchen spaces;
- loss of localised 'recycling' practices, e.g. collecting food scraps for farm animals;

- the physical design of dwellings that reduce storage space;
- new waste technologies;
- hyper-mobile and ‘take away’ lifestyles that challenge traditional eating practices.

Such insights can be crudely encapsulated by a focus on what authors such as Shove (2003) have referred to as ‘social practices’, in which we need to recognise the links between technologies, infrastructures and individual choices within a historical context.

My aim in the workshop will be to consider how we can take account of this second trajectory of social science alongside (and combined with) insights from psychological research, given that ‘waste’ is something that is inherently *socially* constructed (Evans, 2014), as the recent high profile of plastics has demonstrated in the UK. This means up-scaling efforts, and potentially using social marketing in group settings to promote shifts in practice at the household and community scales.

The key assumptions

The evidence presented from WRAP provides a very detailed overview of how a sample of individuals can be segmented and understood in terms of their behaviours and broader lifestyle characteristics. Critically, it provides valuable data on the ways in which respondents utilise social media and their connection to their place-based community or online community. These data provide a valuable starting point and certainly a focus; we also need to recognise what we might call the ‘black box’ of the household (CCE, 2013) and it would be useful to consider evidence and ideas from social science research on waste that has also utilised qualitative, as well as quantitative data. Specifically, appreciating the role of household units (most often family units) seems to be critical, in particular an understanding of the ‘household politics’ that can surround waste practices. This has been demonstrated specifically with regard to food waste, which can be a highly contentious issue *within* households (Metcalfe *et al*., 2012).

Managing expectations

What this discussion of both research context and methodological assumptions leads to is an important note of caution (albeit within the context of a very positive recycling rate already achieved), which is that there are some limitations to a behaviourally-focused approach (CCE, 2013). As members of the workshop will already appreciate, the ‘choice architectures’ available to households are limited by the regulatory setting that permits ‘difficult’ packaging and the aesthetic and physical problems for households trying to store and manage waste. In other words, there are larger regulatory and planning considerations that should not be lost sight of in efforts to make people more responsible. However, the rest of this paper will focus on the practical ways in which the evidence can be used to promote additional recycling, especially for food waste.

Issues to consider for promoting recycling in Wales

Based on the five questions posed, I have set out a series of principles and possibilities for discussion, based on insight from the social science community and my previous research. The evidence from WRAP has been presented through the use of segments of individuals, and there are some exciting opportunities to try and develop an approach that utilises such techniques alongside appreciating the social practice elements of waste (Wilson and Chatterton, 2011).

Social marketing principles

The evidence presented by WRAP implies that engagement, rather than linear communication, is key to delivering higher recycling rates. Accordingly, campaigns need to be co-produced with consumers and focused on positive messages that promote the social desirability of a given behaviour (French *et al*., 2010). This reflects broader changes in the ways in which organisations now engage with consumers, as Figure 1 indicates (Peattie, 2012).

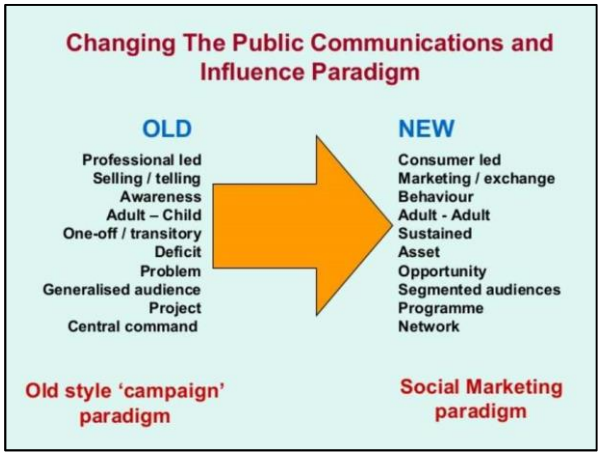

Figure 1: Social Marketing: business thinking for social goals (re-produced with permission of Ken Peattie)

Peattie's (2012) analysis of this new engagement paradigm emphasises the need for consumer-led, exchange-based and opportunity-focused activities, delivered via networks that are horizontal rather than vertical. This approach relates well to the evidence provided by WRAP, with the focus of some segments on the need to see tangible benefits and to integrate waste practices into their lifestyles. Moreover, a collaborative, co-production based approach is more vital than ever, given declining levels of trust amongst publics in authority, 'science' and 'experts'.

The scale(s) of focus

The evidence provided by WARP has focused on individual respondents, with data collected on attributes such as attitudes. It is important to up-scale the focus of potential interventions to recognise the role of the *social*; specifically, this should recognise the role of the household as a dynamic unit, including singles, couples, families with dependent children, multi-occupancy households, and student households. Of particular interest may be multiple occupancy households, with individuals drawn from different backgrounds and negotiating domestic practices (a particular issue with transient households, such as short-term lets and students). This may be a particular challenge in the context of contentious issues like food waste, where both differences in aesthetic tolerances and notions of responsibility may clash.

A further scalar issue relates to the ways in which waste practices become learned across different social settings, such as the home, the workplace and spaces of leisure. Indeed, different forms of practice may emerge across these different settings (Barr *et al*., 2011). There are likely to be opportunities to consider how positive 'spill-over' could occur between (for example) the workplace and the home.

Finally, in addition to physical scale, we should also consider the vital role of 'community' (a real sense of this emerged from the WRAP evidence). Whilst some segments appear rooted in traditional neighbourhood-based communities, others are more mobile and engage with others and reinforce their identities through various forms of social media. Being able to engage with people through these kinds of networks is vital. There are risks here, most notably the fragility of social media platforms and the frequent shifting of 'tribal' behaviour online.

Moments of change

There are clearly opportunities to mobilise the high level of mobility amongst those who are in younger age cohorts, who may experience a key moment of change in their lives. Research has demonstrated how this can be a key point for intervention (Thompson *et al*., 2011). This might include, for example, students arriving at university, new tenants arriving in rented accommodation, people moving into a new property as a homeowner, those having children, those changing jobs, and those who may be signing-up for a new service, such as online food shopping or food delivery. Such moments are key points where new habits could be formed (Verplanken and Aarts, 1999).

Getting the information right (practically and emotionally)

The focus on information and 'what things become' in much of the insight from WRAP indicates that information remains a priority for many people, albeit that this is not going to be a motivator on its own. Clearly there are some challenges here to be overcome that connect to accuracy and presentation. The evidence from WRAP demonstrates that this is rather a 'tight-rope' to tread; some segments want and are interested in very detailed information, whilst others want a simple 'pointer'. However, the critical priorities would seem to be about how understandings of plastics can be improved (building on the momentum recently witnessed in the popular media), and also how understandings of food safety can be enhanced. The former is fairly technical, whilst the latter is a much more complex challenge, especially for those with relatively low levels of understanding of perishables and cooking from fresh ingredients.

Modes of engagement and innovation

The role of community-based partners (place-based and online) seems critical here. In the light of Peattie's (2012) new paradigm of engagement, most interventions will likely succeed only through tightly focusing on specific groups (segments 1, 2 and 6) through as open an innovation process as possible. In the research undertaken for Coca Cola Enterprises (CCE, 2013), the research findings from our in-depth qualitative research were complemented by online contributions, which led to a range of openly-sourced ideas, which eventually resulted in 8 'winners':

https://challenges.openideo.com/challenge/recycle-challenge/winning

The projects ranged from a 'How do I recycle this?' app (geographically specific), to several examples of collective online recycling apps (for neighbourhoods), to aesthetically positive signage and information for household bins. It would be good to discuss how, as a way of delivering value for money, the Welsh Government could use such innovation sourcing to develop specific ideas from as wide a group as possible.

Focusing on food waste

Food waste is a particular issue highlighted in the WRAP evidence, and segment 6 is a particular challenge. As highlighted above, perhaps some of the issues here relate to the wider social practices associated with food and waste developed over the past 40 years or so. The nature of food shopping, packaging, culinary skills, family eating habits, the structure of households and perceptions of food safety and hygiene mean that changing behaviours amongst some segments will be extremely challenging (Evans, 2014; Metcalfe *et al*., 2012). It's likely that a focused intervention, perhaps initially on an experimental basis, would be needed first to test ideas for change. A decision would be needed on whether to focus on

purchasing habits, cooking / re-use habits, or what to do with food waste. Each of these would require a different approach, but perhaps focusing on actual food waste is the simplest initially. This would need to tackle negative perceptions of hygiene and cleanliness in kitchen areas and may require labour-intensive personalised marketing to encourage participation. This would be a way of recognising that there is a household politics to food waste, often regarded as contentious and a point of conflict in houses of multiple occupation where different practices are brought together.

Conclusions

In this paper, I've outlined the ways in which different fields of social science evidence need to be considered to promote higher levels of recycling. This should recognise the role of the *social* and the development of practices across households and social groups. Practically, a community-embedded approach needs to be discussed, with a focus on the scale(s) of intervention, the possibilities provided by 'moments of change', the different roles of 'information', the use of open innovation platforms, and the ways in which food waste can be approached.

References

Barr, S., Guilbert, S., Metcalfe, A., Riley, M., Robinson, G. M., & Tudor, T. L. (2013). Beyond recycling: An integrated approach for understanding municipal waste management. *Applied Geography*, *39*, 67-77.

Barr, S., Shaw, G., & Coles, T. (2011). Sustainable lifestyles: sites, practices, and policy. *Environment and Planning A*, *43*(12), 3011-3029.

Bulkeley, H., & Gregson, N. (2009). Crossing the threshold: municipal waste policy and household waste generation. *Environment and planning A*, *41*(4), 929-945.

Coca Cola Enterprises (2013) Unpacking the Household: exploring the dynamics of household recycling.
CCE and University of Exeter. https://www.cokecce.com/system/file_resources/116/CCE_REPORT_FINAL_V10_selection_hires.pdf

Evans, D. (2014). *Food waste: home consumption, material culture and everyday life*. Bloomsbury Publishing.

French, J. and Blair-Stevens, C., McVey, D., & Merritt, W. (Ed.). (2010). *Social marketing and public health: Theory and practice*. Oxford University Press.

Gregson, N., Metcalfe, A., & Crewe, L. (2007). Identity, mobility, and the throwaway society. *Environment and Planning D: Society and Space*, *25*(4), 682-700.

Gregson, N., Metcalfe, A., & Crewe, L. (2009). Practices of object maintenance and repair: how consumers attend to consumer objects within the home. *Journal of Consumer Culture*, *9*(2), 248-272.

Mckenzie-Mohr, D. (2000). New ways to promote proenvironmental behavior: Promoting sustainable behavior: An introduction to community-based social marketing. *Journal of social issues*, *56*(3), 543-554.

Metcalfe, A., Riley, M., Barr, S., Tudor, T., Robinson, G., & Guilbert, S. (2012). Food waste bins: bridging infrastructures and practices. *The Sociological Review*, *60*(2_suppl), 135-155.

Peattie, K. 2012. *Social Marketing: Business Thinking for Social Goals*. Living with Environmental Change: Working in Partnership session at Communicate 2012.

Riley, M. (2008). From salvage to recycling–new agendas or same old rubbish? *Area*, *40*(1), 79-89.

Schultz, P. W., Oskamp, S., & Mainieri, T. (1995). Who recycles and when? A review of personal and situational factors. *Journal of environmental psychology*, *15*(2), 105-121.

Thaler, R., & Sunstein, C. (2008). Nudge: The gentle power of choice architecture. *New Haven, Conn.: Yale*.

Thompson, S., Michaelson, J., Abdallah, S., Johnson, V., Morris, D., Riley, K., & Simms, A. (2011).
'Moments of Change' as opportunities for influencing behaviour. DEFRA.
http://orca.cf.ac.uk/43453/1/MomentsofChangeEV0506FinalReportNov2011%282%29.pdf

Tudor, T., Robinson, G. M., Riley, M., Guilbert, S., & Barr, S. W. (2011). Challenges facing the sustainable consumption and waste management agendas: perspectives on UK households. *Local Environment*, *16*(1), 51-66.

Verplanken, B., & Aarts, H. (1999). Habit, attitude, and planned behaviour: is habit an empty construct or an interesting case of goal-directed automaticity? *European review of social psychology*, *10*(1), 101134.

Wilson, C., & Chatterton, T. (2011). Multiple models to inform climate change policy: a pragmatic response to the 'beyond the ABC' debate. *Environment and Planning A*, *43*(12), 2781-2787.

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