The Nexus of Energy Use, Ageing, and Health and Well-being among Older Australians

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Introduction and literature review

Energy efficiency is an important topic in a context of climate change, rising energy prices, fuel poverty, and energy security. Promoting household energy efficiency is a key intervention for tackling climate change (UNEP 2014). However, energy use is a complex phenomenon concomitant with practices of everyday life: subsistence, care, comfort, convenience – and all the things that make home. Simply telling people to the right or wrong thing to do regarding energy consumption is not the best approach (Gordon et al 2018). Energy researchers are now paying attention to how the nexus of everyday practices are shaped by, and shape energy use (Shove and Walker 2014).

There is increasing attention from researchers, policymakers and stakeholders on the nexus between energy, health and wellbeing. Energy is a resource for maintaining health, making home, living comfortably, caring for the self and others, and tending to the sick and dying (WHO 2005; Waitt et al 2016). These issues are a particular concern given our ageing population and focus on ageing in place in Australia (AIHW 2017). Our ageing population and increasing life expectancy is also synchronous with a rise in chronic disease. As older people are encouraged to 'manage' their health & well-being as they age – energy use can play an important role.

High energy costs and concerns about energy efficiency can lead to worrying economic, social and health outcomes for older people including restricted expenditure on essential food and clothing, physical discomfort, reduced physical and mental well-being, lloneliness and social isolation, strained household relationships, and distress about the care, comfort and social and emotional well0being of householders (Hitchings and Day 2011; Chester 2013). But energy is also used to perform practices that support our health and well-being such as cooking, keeping comfortable, leisure activities, and social interaction. Yet, the links between domestic energy use, health, and well-being, and ageing are not well understood. Our project address this to explore the following research questions: RQ1: How are the domestic energy use practices of older Australians configured by their understanding and experiences of ageing, (ill)health and well-being. RQ2: How do older Australians negotiate the energy use challenges to manage their health and well-being?

We drew upon practice theory (Shove et al 2012) to understand how people's energy use practices coincide with health, well-being and home-making practices. Practice theory refers to a broad paradigm of approaches to understanding social practices. Social practices refer to everyday or regular practices or habits such as using energy in the home and the way that these are typically and habitually performed (Schatzki 2002). Reckwitz (2002) states that practice comprises different elements: bodily and mental activities, use of materials/things, knowledge, language, structures, place, and human agency that are utilised to routinely perform the practice. Thus, the abstract concept of practices is the unit of analysis. Practices link to others to form constellations - a nexus of practices such as energy use, making home, health, and well-being practices. Hui et al (2017) draw attention to five forces that can frame the nexus of practices. Suffusion refers to how certain phenomena like affect, ideology, general understandings, and socio-materiality suffuse through a practice nexus. Threading through refers to how certain things such as an object or a specific practice can thread through the nexus of practices, thereby linking them. Largeness refers to how all sorts of practices connect, forming complexes from small to large. Changing connections recognises how a practice nexus is continually happening and changing in small, and occasionally larger ways over time, space, jurisdiction, and materiality. Finally, practitioners, foregrounds how people are participants who perpetuate and transform practices through their actions.

Method/Approach

Our study adopted a sensory ethnography (Pink and Morgan 2013) with 34 older householders in regional, NSW, Australia who were recruited using a purposive, snowball sampling approach. Participants ranged from 60 to 97 years old, with the majority of Anglo-Australian, three Dutch, and one Italian ancestry. The majority owned their home, with two renting government housing. Several lived alone, some with spouse, and a few with children. Our first step was a narrative interview where participants were asked to chart their history in their home, and discuss how energy use, health, well-being and how these relate. Topics covered in the 1st interview included: Background of the participants and their homes. The second step involved re-visiting participants in their homes for a video ethnography. Here, participants played a card game mapping how various appliances relate to health, wellbeing, and energy use. They were then asked to demonstrate examples of energy use practices that relate to health and wellbeing (e.g. using a heater, a health device, or an appliance for leisure).

Results/Findings

Our participants drew attention to how energy is a basic human need which seemed to suffuse through the nexus. Energy was important for making a home comfortable and managing their health and well-being as they age: "You need electricity. I can't see, with the weather, the way things are, how you'd survive without it. Nice tempered water, the luxuries and things like that, at this time of life, I need them" (Noelene, 81, Figtree). However, many participants were also "extremely frugal". Several participants demonstrated to us their energy using devices on video that helped them manage their health such as CPAP machines, chair lifts, medical alert pendants, blood pressure machines, blood sugar monitors, hearing aids, and electric chairs and beds. These devices and practices for managing health thread through the practice nexus. However, energy use also facilitated well-being practices - for example mobile phones and laptops enable our participants to study, read, play games, stay in touch with friends and family, and indulge their interests online. I enrolled at Uni, doing creative writing and philosophy. If I don't do this, I will just become a little old lady watching television in the day. And...waiting to die. Yeah, I do all my reading on it. I write everything. I submit through Moodle. I'd be lost without my laptop. And then, I've got my iPad" (Audrey, 72, Towradgi). The kettle enabled the pleasure of sharing a cup of tea and a chat with a visitor. Two participants even owned electric train sets that gave them a lot of joy. Participants spoke about how the nexus of energy, making home, health and well-being practices changed over time, materiality and jurisdiction, as they cared for sick or dying partners, they moved or renovated the home, or when energy utilities were privatised. "Well the government used to run them. They were doing all right, it was virtually unlimited supply of electricity at a reasonable cost (Ken, 74, Figtree). Many of our participants were unhappy at the marketisation of energy in Australia and identified how difficult it was getting to manage energy costs while maintaining health and well-being.

Discussion and Implications

Our study has drawn attention to how energy, health & well-being form a nexus of practices that also connect to practices of making home, cooking, caring, leisure, socialisation, and making home. Various elements are deployed such as appliances, rooms, bodies, ideas, and language. We find that health issues make demands on energy use as people age, but also supports practices of well-being. We argue that rather than being a market resource for which

older Australians act as 'consumers', energy should be reconceived as a basic human need that sustains health, wellbeing, everyday life, making home. Australian energy policy and programmes should acknowledge the complex nexus that helps explain what energy is for.

References

- Australian Institute of Health and Welfare (AIHW) (2017) *Older Australia at a glance*. Sydney: AIHW. Available online at: <u>https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/demographics-of-older-australians/australia-s-changing-age-and-gender-profile</u>, [Accessed 01/02/2019].
- Chester, L. (2013) The impacts and consequences for low-income Australian households of rising energy prices. Sydney: University of Sydney.
- Gordon, R., Waitt, G., Cooper, P., Butler, K. (2018). Storying energy consumption: Collective video storytelling in energy efficiency social marketing. *Journal of Environmental Management*. 213:1-10.
- Hitchings, R., Day, R. (2011). How older people relate to the private winter warmth practices of their peers and why we should be interested. *Environment and Planning A: Economy and Space*, 43(10): 2452-2467.
- Hui, A., Schatzki, T., Shove, E. (2017). *The nexus of practices: Connections, constellations, practitioners*. London: Routledge.
- Pink, S., Morgan, J. 2013. Short-term ethnography: Intense routes to knowing. *Symbolic Interaction*, 36(3): 351-361
- Reckwitz, A. (2002). Toward a theory of social practices: a development in culturalist theorizing. *Journal of Social Theory*, 5(2): 243-263.
- Shove, E., Walker, G., 2014. What is energy for? Social practice and energy demand. *Theory, Culture and Society*, 31(5): 41-58.
- Shove, E., Pantzar, M., Wilson, M. (2012). *The dynamics of social practice: Everyday life and how it changes*. London: Sage.
- United Nations Environment Programme. (2014). *The emissions gap report 2014: A UNEP synthesis report*. Nairobi, UNEP.
- Waitt, G., Roggeveen, K., Gordon, R., Butler, K. & Cooper, P. (2016). Tyrannies of thrift: Governmentality and older, low-income people's energy efficiency narratives in the Illawarra, Australia. *Energy Policy*, 90, 37-45.
- World Health Organization (2005). *Energy and Health*. Geneva: World Health Organisation, Sustainable Development and Healthy Environments Cluster.