

## Editorial Introduction

Australian public policy is increasingly focusing on supporting successful ageing and the idea of living better and longer. Yet there has been little attention given to the role that domestic energy consumption plays in helping older people manage their health and well-being.

Our research demonstrates that householders have different capacities to manage domestic energy costs to support their health, well-being and comfort. We advocate for an energy justice approach to provide greater support for people as they age.

## About the Authors

Theresa Harada, ARC Research Fellow, School of Advertising, Marketing and Public Relations, QUT Business School

Professor Ross Gordon, School of Advertising, Marketing and Public Relations, QUT Business School

## The body politics of energy, health, and well-being

Theresa Harada and Ross Gordon

In the context of a global ageing population (United Nations, 2017), there has been a greater policy focus on accommodating an increasing percentage of the population that will require support as they age. In Australia, government policies encourage ageing in place as a way of ‘Living Longer Living Better’ by providing various levels and types of home assistance (Australian Government, 2013). In this scenario, people live out their twilight years in the comfort of home with external assistance, and the burden on the public health care system is reduced. Yet, for the 77% of people aged over 85 years who live in their own homes (Australian Institute of Health and Wellbeing, 2016), home is not always a comfortable place. Many older people find themselves in family homes that are larger than necessary, not particularly energy efficient and pose challenges for heating or cooling to a comfortable temperature—with a minimum of 18 °C recommended by the World Health Organization (WHO, 2018) to protect health and well-being. This creates challenges for those on lower incomes or in the rental sector, for which installing energy-efficient retrofits or paying high bills are challenging. Considering these policy aims; we argue that greater attention must be paid to how domestic energy is integral to ageing successfully. This is important in a deregulated capitalist energy market (Gordon et al., 2021) in which energy prices have risen exponentially (Gordon, 2022). Energy affordability remains a significant issue for low-income Australian households (Australian Energy Regulator, 2019).

It is recognised that energy consumption is important for preventing ill-health and mortality, managing physical illness or disease, supporting positive mental health, allowing comfort, and sustaining social relations (Maller & Strengers, 2011; Smolander, 2002; WHO, 2013, 2018b). These important aspects of successful ageing have received attention mainly along two lines: biological and psychological science and energy research. Medical science gives attention to how energy is used to manage the physical aspects of ageing in terms of biological and physiological functioning, illness and disease, the need for specialist medical equipment, or recommended temperature ranges for avoiding mortality from either heat or cold (Gasparrini et al., 2015). Psychological studies that investigate ageing highlight the importance of cognitive functioning, perceptions of life satisfaction and social connections (Gwozdz & Sousa-Poza, 2010). Energy research focuses on energy usage patterns as people age (Chester, 2014), improving energy efficiency and thermal comfort, and reducing anxiety associated with energy affordability (Curl & Kearns, 2017). Yet, we know little about how people manage energy costs to age successfully in their homes (Hernández, 2016).

## Researching the nexus of health, well-being, and ageing

Our interest in understanding how domestic energy is used to support health and well-being as people age arises from Energy+Illawarra, a prior interdisciplinary research project with older people aimed to improve energy efficiency, reduce energy costs and improve comfort in public and social housing (Gordon et al., 2018).

We found that energy costs were a source of considerable stress and anxiety in low-income households (Waitt et al., 2018). This affected everyday household practices, often with adverse health and well-being outcomes (Waitt & Harada, 2019).

Our subsequent research that we report on here utilised a social practice theory perspective and a mixed-method research design to collect quantitative and qualitative data in three stages from people aged over 60 years who lived in their own homes in Australia. We first conducted an online survey to collect baseline data about energy practices, health, and well-being from 1,583 people aged 60+ years nationwide in March 2018.

The second stage employed a short-term ethnographic approach (Pink, 2009) involving narrative interviews, a projective cue card activity and a home video ethnography. Data were collected with the help of 39 people from various household types. The third stage was a quantitative follow-up survey with the same cohort sampled at baseline that was conducted one year later and achieved a sample of 851 people.

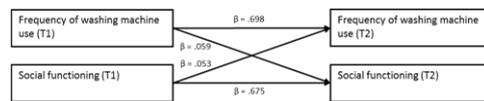
### Research findings

The baseline and follow-up survey results were analysed using cross-lagged panel modelling. We found a mixture of statistically significant uni-directional and bi-directional (e.g., Figures 1 and 2) associations between energy and health and well-being variables. This evidence of the complex and two-way relationship between energy use and health and well-being was further

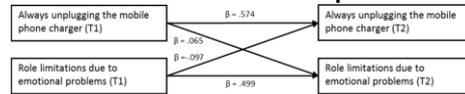
investigated through the qualitative research stage.

Our ethnographic research allowed us to consider how people use a range of domestic appliances to promote health and well-being in terms of health conditions, long-term relationships, and bodily capacities.

**Figure 1: Bi-directional relationship between frequency of washing machine use and social functioning**



**Figure 2: Bi-directional relationship between constantly unplugging the mobile charger when it is not in use and role limitations due to emotional problems**



This enabled us to illustrate which appliances were necessary, how they were used and their perceived value in terms of health, well-being, and ageing. Overall, we found that the use of domestic energy appliances was weighed in terms of cost and householders' capacities to find alternative ways to support health and well-being while ageing. We found that increased energy use and cost, low socio-economic status and poor-quality housing were often associated with states of ill-health rather than concerns about ageing.

However, we identified that some older people with resources could actively plan how to maintain health and well-being and minimise the energy costs associated with ageing. In contrast, others with fewer resources were forced to make decisions about how they used energy to achieve states of physical, mental, and social well-being.

High energy prices create challenges for participants, who are generally expected to use more energy as their health becomes less robust (Chester, 2013; Ritchie et al., 1981). For example, people who have cancer may require the heating on more often or at a higher temperature, someone with kidney disease may need to use a home dialysis machine, or a person with depression may need to use entertainment or leisure devices more

often to help manage their emotional health—leading to higher dollar value energy bills and kWh energy use (Liddle, 2011). However, we found that thrifty energy practices by older people included not using heating or cooling, going to bed early to keep warm, turning off hot water systems and lights, and avoiding socialising at home. Importantly, we found that people came up with creative and innovative ways to minimise energy use to support aspects of well-being as they age that were dependent on their physical and mental capacity to cope with the challenges of ageing.

We provide three snapshots of how domestic energy practices were used to support health, well-being, and successful ageing.

### Snapshot 1: Social connectivity

Georgie is a 72-year-old retired professional who lives in her unit (flat/apartment) in a complex. Georgie is on a low income and demonstrates some of the tensions of managing her health and well-being with her capability to meet the costs of energy. For example, Georgie's home is not energy efficient and is cold in winter and hot in summer. She has not installed air conditioning because of her worries about the cost of energy. Georgie owns an electric space heater but very rarely turns it on. This is despite recommendations that older people maintain higher indoor temperatures to support successful ageing (WHO, 2018).

*'It is a sacrifice, i.e., it can get really, really hot. And it's much nicer to be comfortable. And it can get really, really cold. And to have a blanket on, or my dressing gown over my clothes, you don't quite feel good about that .... It's horrible to be sick, with a mental illness or a physical illness, and be in a cold, cold place, I think. Because the place is not welcoming. You don't like to ... Just like I, I don't want to invite friends here, because it's not a cosy, welcoming place.'*

Georgie has no significant health problems—her biological capacities enable her to endure cold conditions. However, in the statement above, Georgie reflects here that despite the capacity of her body as a biological entity to adapt to these conditions, there are emotional, affective, and social consequences. A warm home becomes part of creating a ‘cosy, welcoming place’ where sickness or illness can be overcome, feelings of comfort are evoked, and social relations are enabled. Not heating the home is seen as a ‘sacrifice’ where she needs to go without bodily comforts and is constrained in her ability to entertain friends or family.

Georgie saves money by rarely heating her home, turning off the electric storage hot water system for days at a time, often turning off lights when there is some ambient daylight and minimising the use of appliances. However, emotional, and affective intensities also arise through the lack of sociality that pushes her to find new types of social connectedness.

Consequently, Georgie returned to university to study to ‘stay sane’. She uses a laptop and iPad for up to 7 hours per day. As our [video ethnography footage](#) shows, study allows Georgie to connect with the world and to negate understanding of herself as an older woman with nothing better to do but watch television.

*‘I thought, if I don’t do this, I will just become a little old lady watching television in the day. And that’s, I would not be able to, and waiting to die ... that’s all I will be, waiting to die, watching television ... So that stimulates d with the world, keeps me thinking. Gives me something extra to think about, that’s important ... Because it’s mainly about having something meaningful for me to focus my attention.’*

Her reflections here illustrate the connections between health and well-being and energy consumption. To stave off the affective intensities of sadness and loneliness associated with feeling ‘little’ and ‘old’ or living without warmth and comfort, the role of a mature-age student gives her a sense of purpose and fulfilment in her life.

Thus, the affective and emotional intensities which come about through the choice of appliances, such as her iPad and laptop, support her social connectedness, mental acuity and cognitive stimulation and enhance her overall feelings of well-being as she ages.

## Snapshot 2: Living and dying well

Carl is 97 years old, on a low income and lives alone in a 120-year-old home that is difficult to heat during winter and cool during the summer. There is central reverse-cycle air conditioning throughout the house, but Carl is keenly aware of the cost of electricity. He experiences a temperature range in his home that is well below WHO recommendations, which may impact his physical health. Yet, he explains that in the latter part of his Scottish wife’s life, they used the air conditioning all day long to ensure her comfort:

*‘So, I have to be careful ... My wife died just over six years ago, and she was ill for a long time. So, all day, I had to have the air conditioners on...I switched the AC on when I got up at 7 AM and it stayed on all day before I went to bed maybe at half past 10 at night. By then, the house was warm when we get into bed; we’re all right until morning. I continued to do that after my wife died...But it had to be on for my wife’s comfort.’*

Using electricity to provide a comfortable home was non-negotiable as Carl’s wife neared the end of her life. The materiality of the house and anxieties about energy costs were subordinated by the affective intensities of love and care for his wife, the pleasures and comforts of bodily warmth, and ideas about not only living but dying well. The body at the nexus of energy, health and well-being is therefore not only biological but affective and emotional, entwined in long-term, committed social relations and familial responsibilities.



Figure 3: Carl and his reverse-cycle air-con

Carl saves money by lowering the heating now that he is alone (Figure 3).

*‘That keeps me at least as warm as I must be. So, I don’t shiver. That’s [reverse-cycle air conditioning] is the only heating, so I need that for my well-being. It’s also my health too because I’d probably get pneumonia if I didn’t have a heater.’*

Carl negotiates minimum energy use in relation to his bodily capacities as he ages. His commitment to care for his dying wife necessitated intensive energy use. Now living alone, Carl lives frugally, but we ask if he is now able to use energy to live comfortably and in a way that supports his health and well-being.

## Snapshot 3: Social and cultural capital

Albert and Milly are a married couple of Italian ethnicity with relatively good income and health and live in an energy-efficient home. They use solar panels, water tanks, building materials, design, and orientation to reduce energy costs. They nurture an organic garden to provide fresh produce for the family and preserve food through traditional and cultural practices. Albert produces wine, olives, fruits, salami and prosciutto. As our [video footage](#) shows, the use of a Cryovac machine helps preserve and extend the life of food. These labour-intensive practices require a certain amount of bodily strength, skill, and mental acuity. Their home is comfortable, with many high-end appliances (ovens, fridges, freezers, dishwasher, dryer, kitchen appliances) and has ducted heating and cooling throughout the home. Within the energy-efficient home, moral economies of thrift create flows of affect and emotion through the body—a love of self-sufficiency, saving money and resources, and a hate of waste. Milly explains that their energy-efficient practices emanate from an embodied knowledge of thrift.

*‘I never had a job that paid a lot of money anyway. So, I come from a family with six children, so it’s always about saving, saving, saving.’*

We argue that there is a body politics to domestic energy consumption practices. This energy-efficient home is only achievable with the appropriate amount of physical, economic, social, and cultural capital to design, afford and manage an energy-efficient home.

## Policy implications

Rising energy bills create major barriers for older Australians to manage their energy use, health and well-being, and more robust price regulation and controls may be required. Energy should be considered a fundamental human right rather than a free market commodity. Energy stakeholders should recognise that energy helps older Australians manage their health and can enable their well-being through the performance of various social and leisure activities—therefore, policy, programs and advocacy should support an energy well-being agenda. In the interests of social justice, governments should consider subsidising energy generation systems for low-income older Australians to promote healthy ageing.

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