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## Exploring How Older People Living at Home Alone Occupy Their Time – A Time-Geographic Study

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## Exploring How Older People Living at Home Alone Occupy Their Time – A Time-Geographic Study

### Abstract

*Background:* Knowing what older people choose to do with their time informs occupational therapists in their everyday practice. This study explored how sixteen older Australians living at home alone without support occupied their time.

*Method:* People aged 70 years and older living alone in one's home and receiving no support services were voluntary recruited. The participants completed time-use diaries for 5 days and recorded how, with whom, and where they spent time. Data were coded and analyzed using the software program Vardagen.

*Results:* The participants reported 217 different daily activities. While patterns of daily participation varied, all of the participants spent some time with others and some time away from but near home. The majority of their time was spent alone. On average, the participants reported meaningfulness in their occupations 90% of the days.

*Conclusion:* The study highlighted how older people living at home without support services can meaningfully occupy their time if they have access to personally relevant people and places.

### Keywords

daily activities, occupations, participation, time use

### Cover Page Footnote

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Participation in different activities and being a resource to families, communities, and economies are both recognized as important for healthy aging (World Health Organization, 2019) and are important considerations for occupational therapists working with older people. However, discussions about aging well often ignore the role of home-based activities and personal daily habits in maintaining older people's life satisfaction and well-being, and the topic is not found in occupational therapy research on promoting and maintaining the health of older people. Moreover, despite proposals for a salutogenic approach to health (Becker et al., 2010), most studies in gerontology focus on people with impairments who need support, while there are few studies on those older people who are managing to live independently without support services. This study, which is underpinned by an ecological model of health (Filiatrault et al., 2015) and undertaken by occupational therapists working in the field of health promotion, addresses these gaps identified in research on aging by providing insight into how older people who are living at home alone without support services occupy their time. Knowing what older people living independently choose to do with their time can help inform occupational therapists and other health care practitioners who provide services for the elderly, thus ensuring they best meet the needs of clients living at home alone. Such knowledge is essential for the provision of customer directed care, which is becoming increasingly common in domiciliary and community-based aged services, especially in countries such as Australia, the United States, the United Kingdom, and New Zealand (Ottmann et al., 2013). Practitioners can also apply understanding about effective strategies that enable older people to age well when working with health programs or with older people in aged care facilities.

This study replicated an occupational science research project undertaken in Umea in northern Sweden. It is the first known project to adopt a time-geographic approach with older people as participants (Nilsson et al., 2015). Occupational science was established in 1989 by occupational therapists to generate knowledge about occupation, the core domain of occupational therapists, and to understand the relationship between occupation and health (Zemke & Clark, 1996). Occupational science is an important knowledge source for occupational therapists and informs their clinical reasoning (Kristensen & Schultz Petersen, 2016) as it explores how geophysical, socio-cultural, economic, and political contexts shape what people do (Whiteford et al., 2005). In occupational therapy and occupational science, the daily activities in which a person participates, the things they do, are conceptualized as occupations (Hocking, 2009). Occupations encompass everything people do as individuals in families and in communities to occupy time and to bring purpose and meaning to life (Christiansen & Townsend, 2010). Occupational scientists adopt an occupational perspective in their research and maintain that humans are occupational beings who need personally meaningful occupations for health and well-being. An occupational perspective is "*a way of looking at and thinking about human doing*" (Njelesani et al., 2014, p. 226).

Time-use studies of healthy older people have demonstrated that the majority of their time is spent indoors performing occupations such as resting or sleeping (Cha, 2018; Punyakaew et al., 2019) and alone (Punyakaew et al., 2019). It is interesting that it has been shown that satisfaction with life seems to increase with the amount of time spent in leisure activities and outdoors (Cha, 2018). In addition, an increased time spent in social participation was associated with less sedentary time, which could have potential health benefits (Kikuchi et al., 2017). Gender, as well as disadvantages associated with lower socio-economic levels, have been shown to influence patterns of occupational involvement (Punyakaew et al., 2019; Sabbath et al., 2016), indicating that time use of older people is influenced by various factors. Occupational temporality, when time and space are integrated (Zemke, 2004), could give insights into the occupational needs of older people (Nilsson et al., 2015), which, in turn, could enhance the development of health programs for older people.

The rationale for this study was that adopting an occupational perspective while investigating the ordinary, everyday activities older people choose to do while living at home will increase understanding of the relationship between aging, context, and doing. Therefore, by application of a time-geographic perspective, this study aims to explore the daily occupations of older people who live alone in their homes without support services. The findings will interest and inform health professionals working with older people who are either living in their own homes or who are living in aged care facilities.

## Method

### Design

We adopted a time-geographic approach (Ellegård, 1999) to gather information about the time component and context of the daily occupations of older people living at home alone, as this approach aligns well with an occupational perspective of health. *Vardagen*, a Swedish word meaning everyday life, was the time-geographic software program selected for this study (Ellegård, 2009). Human geographers developed the *Vardagen* program in Sweden in the 1990s, and it has since undergone further development that has occurred in cooperation with Swedish occupational therapists. Since its development, the program has been used by researchers in various fields, mainly human geography, technology, social work, and occupational therapy (Bendixen & Ellegård, 2014; Nilsson et al., 2015; Orban et al., 2012) to explore areas such as living in urban areas and the use of mobile information and communication technologies (ICTs) in everyday life (Ellegård, 2019).

### Participants

Older people living in the Shoalhaven on the south coast of New South Wales, Australia, were recruited to this study, which was approved by the ethical board at the University of Wollongong. The criteria for voluntary participation in the study were: at least 70 years of age, living alone in one's own or rented home in Shoalhaven, and receiving no support services. The Research on Humans Ethics Committee at the University of Wollongong approved the study, and it was undertaken in accordance with all required ethical standards.

Sixteen participants (four men and 12 women, aged 71 to 84 years) provided informed consent. Twelve of the participants were living in a house, two were living in an apartment, and one was living in a granny flat, a small apartment attached to the home of a family member. At the time of the study, the participants were all living alone and self-reported as being well. No one was receiving any support or home care services.

### Procedure

The means of recruitment were local media, local organizations, and word of mouth. Potential participants attended a workshop conducted at the Shoalhaven Campus of the University of Wollongong for training and instructions in the use of *Vardagen* time-use diaries. Others who were interested but could not attend the workshops were given individual instructions in their own homes.

The participants were then asked to complete a hand-written, open diary for 5 days. They could choose any 5 days in a 2-month period (January to February) but were requested to include weekends and weekdays and to select days considered normal or usual. An open diary format was selected, as it enabled the participants to self-define their occupations (Chilvers et al., 2010). As well as recording when and for how long they engaged in their daily occupations, the participants recorded where the occupations occurred (at home, close to home, more than 300 m from home, in another city or country) and with whom (with a friend, with family, or with others). In addition, the participants were asked to record the meaningfulness of their daily occupations by using a scale from 1 to 5; 1 = *very important*, 2 = *important*, 3 = *neither meaningful nor unmeaningful*, 4 = *not*

*meaningful*, and 5 = *waste of time*. It was explained to the participants that a meaningful occupation refers to doing something that has personal importance or particular meaning (Fisher, 2009).

### **Data Analysis**

We selected Vardagen for data analysis because it can be used to describe and analyze an individual's daily life as it is presented in a time-use diary. One interesting feature of Vardagen is its flexibility, as the time-use diaries can be customized based on a particular study's aims. Vardagen can also capture the meaningfulness (i.e., the personal importance of daily occupations) as rated by the participant and the extent of daily social connections (Ellegård, 2009; Nilsson et al., 2015). Such occupational features have particular relevance for occupational therapists, whose role is to enable people to participate in the occupations of everyday life; to do the things they need and want to do as individuals, with families and in communities; and to occupy time and bring meaning and purpose to life (World Federation of Occupational Therapists, 2019).

The Vardagen program is based on a specially formulated categorization scheme that contains the codes that fit the program. It is also possible to add one's own codes. In its basic form, the program can be used to visualize activities, geographical mobility and social contexts, and to calculate the average time expenditures for activities, stays in locations, and social situations (Ellegård, 1999).

Sixteen diaries were submitted for analysis, but one was excluded because the participant had not followed the instructions and neglected to include the time spent on each recorded occupation. All other reported daily occupations were coded according to categories and levels specified in Vardagen; for example, 003 eating breakfast, 027 getting dressed after sleep, 247 helping with homework, 314 knitting, and 666 harvesting vegetables. All coded data were entered into the software program for analysis. To ensure consistency in coding, a research assistance trained and supervised by the first author entered all codes. Using the software program, we developed frequency tables and graphs for each participant. For descriptive analysis of the occupational engagement of the participants as a whole group, all time frequencies were exported to Excel.

### **Results**

There was a wide variety in the reported daily occupations recorded by the 15 people over 5 days. Included in the 217 daily occupations recorded were: reading the bible, feeding and talking to the caged pet bird, tending the grave site of a spouse, and driving grandchildren to after-school activities. In addition, each person's daily pattern of participation in occupations, as described in the diaries, was unique. For example, some of the participants followed the same routine each day whereas others had less conformity in their occupational patterns.

Figure 1 shows the percentage of time the participants spent with other people over the 5 days. All of the participants spent the majority of their time alone with an average of 84% of their time spent alone.

Although most of the participants' time was spent alone, on average 50% of their recorded days included at least a small amount of time with friends, with three participants spending part of every day with friends. Approximately 30% of the recorded days included time spent with family, and two participants spent part of every day with family. In addition, about 40% of the recorded days included time spent with others or at groups and organizations. All of the participants spent at least part of every day alone. The men spent more time alone each day than the women. All of the participants spent at least part of one day away from home at places such as the golf course, the shopping center, and the hospital. Only one slept away from home during the 5 day periods.

**Figure 1**

*Reported time spent alone and with family, friends, or others*

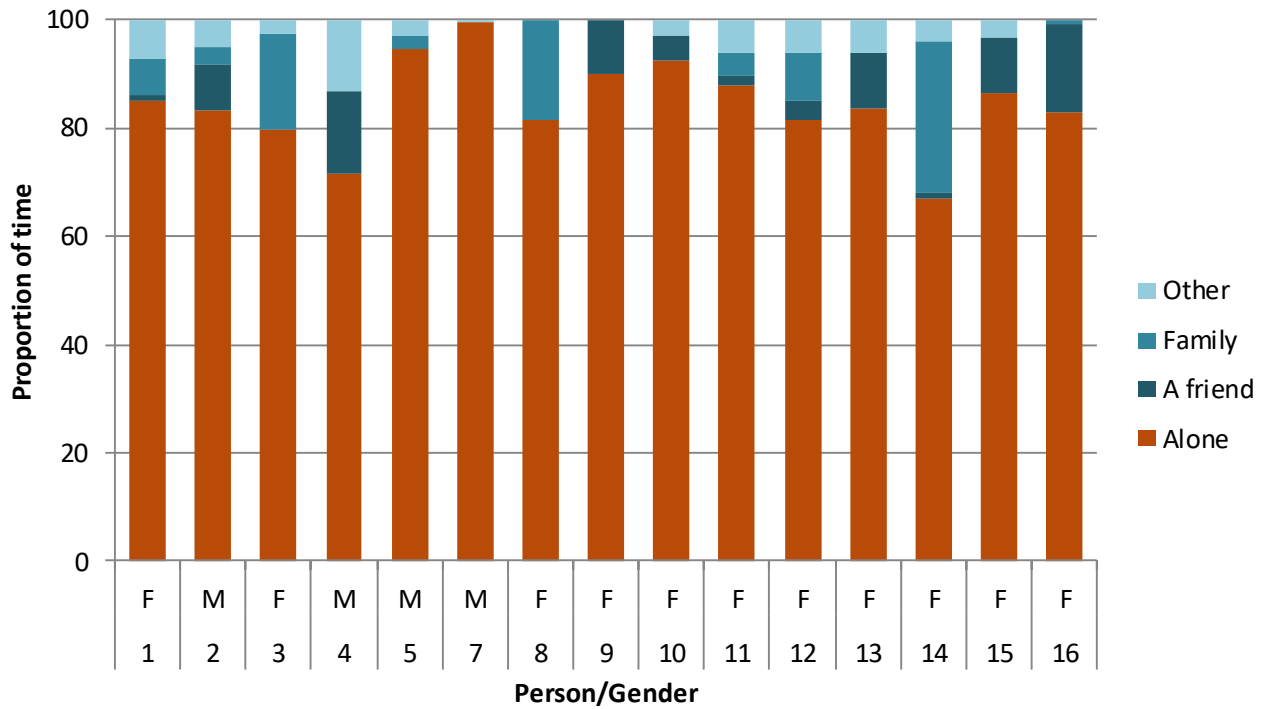
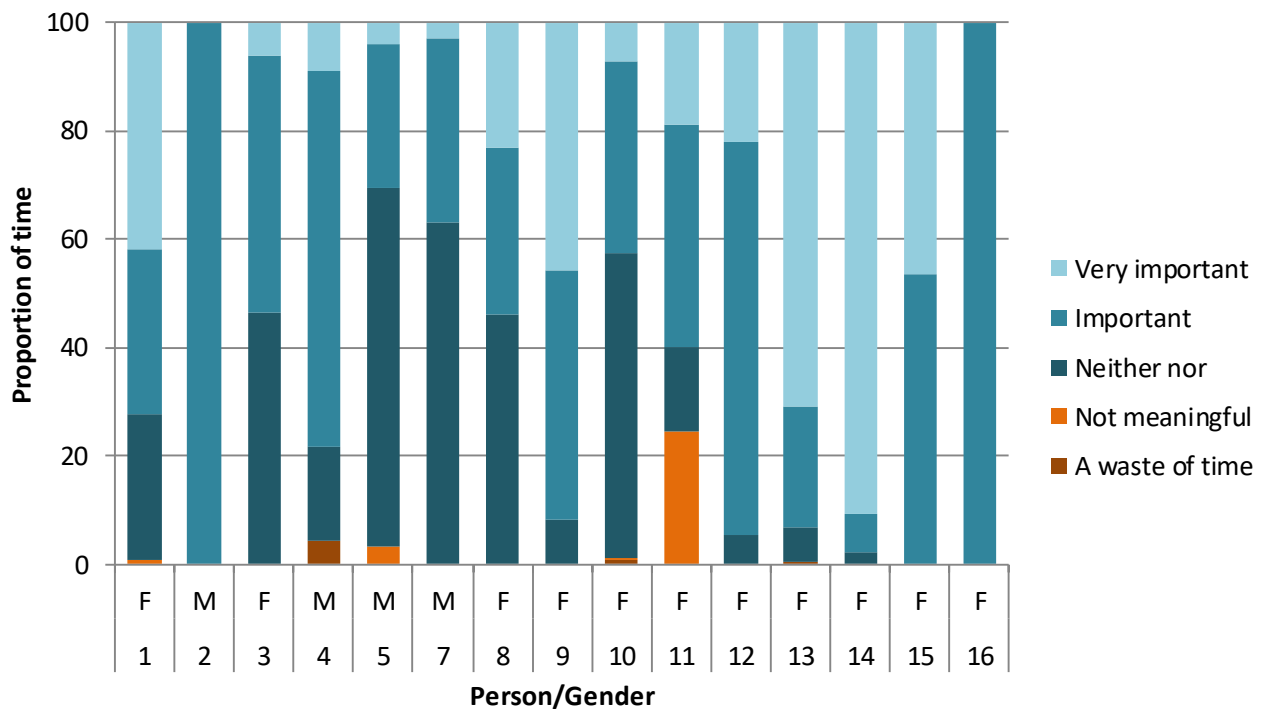


Figure 2 shows the reported meaningfulness of all of the participants' occupations over the 5 days. The most common rating used by all of the participants over the 5 days was *important*, used on average on 90% of the days.

**Figure 2**

*Reported meaningfulness of daily occupations: a waste of time; not meaningful; neither nor; important; very important*



For participant 13, an 85-year-old female, a meaningful occupation was speaking on the phone to her cousin in London. Only three people recorded participating in occupations considered to be a waste of time. For participant 13, trying to start the mower was a waste of time, while for participant 4, a 77-year-old male, attending the home of his partner's son for a late Christmas gathering was a waste of time because he felt everything was so false and wasteful. Only four people recorded participating in nonmeaningful activities. Participant 11, an 80-year-old female, recorded that spending time trying to solve a problem with her computer was nonmeaningful.

### Discussion

The time-geographic approach adopted for this study provided data on where, for how long, and with whom a small sample of older Shoalhaven people chose to occupy their time in a personally meaningful way. As such, the study offered a window through which to view the everyday experience of day-to-day life, which is often seen but not noticed or appreciated by others (Hasselkus, 2011). The findings give a snapshot of the daily occupations of older people who live alone in their homes without support services. This snapshot cannot be generalized because of the study's limitations, which include difficulty in recruiting older people who are not actively engaged; the study's relatively small sample; and the nonreporting of occupations that the participants seemingly take for granted, e.g., having a shower or bath, eating breakfast, going to bed. However, despite the limitations, there are some implications arising from the study for occupational scientists; occupational therapists; and other service providers in the aged care industry, such as activity officers.

From an occupational perspective, the wide range of occupations that were reported demonstrates the nonhomogeneity of older people. Given the relationship between engagement in meaningful occupation and well-being (Wilcock, 2006) and the individualized nature of meaning (Fisher, 2009; Hasselkus, 2011), this particular finding means that once older people living at home require support, then flexible and client-centred services are needed to accommodate their diverse occupational interests and needs.

The high level of meaningfulness of the participants' chosen daily occupations highlights the importance of home-based daily habits for older people's sense of purpose. As older people living alone find meaning in spending time with family and friends, support to facilitate access to family and friends is also important. As social participation contributes to healthy aging (Kikuchi et al., 2017; Larsson et al., 2016; Nilsson et al., 2018) community-based services to create opportunities for engagement with others may decrease the risk of loneliness among older people.

There are some practical implications arising from this study that are relevant for occupational therapists working with older people. First, living at home alone is more frequently on the public radar. Throughout the Western world, the number of one person households is increasing and the trend is spreading in non-Western countries (De Vaus & Qu, 2015). Second, for those older people who make the transition to residential aged care facilities, it is apparent from this study that it is important they have opportunities and choices to satisfy their individual interests. And third, programs that are client-centered are necessary, given the trend to consumer directed care (<http://mcarthur.com.au/media/1428/understanding-cdc-a-simple-definition.pdf>). While group activities may satisfy residents' needs for social interaction and physical excursion, it seems older people still need to be able to do what they need, want, and are expected to do.

In addition, the study highlighted the importance of participation in daily occupations for sustaining active and healthy aging and reinforced Wright St. Clair's (2012) finding that the value of the minutiae of daily life increases as people age, particularly for people living alone. Given that people are living longer and that there is an increasing number of people living alone, at least in

Western societies such as Australia and the United States (de Vaus & Qu, 2015), it is important to appreciate that older people living at home alone, with or without support, or in residential facilities need to experience the minutiae. Daily routines are personally meaningful. Therefore, it is important that older people continue to do these routine activities for themselves, rather than for someone else do them for them.

In relation to implications for research, gender differences in time use among older people living at home with or without support could be explored. Moreover, similar studies could be undertaken in other countries to help understand the role of geophysical and socio-cultural contexts in enabling older people living at home alone to participate in various meaningful occupations. Finally, other time-use studies exploring the form, function, and meaning of everyday doing of people of all ages could highlight potential infrastructure development in society to address occupational needs (Njelesani et al., 2014).

## Conclusion

Time-use studies such as this one that involve diaries completed by older people living at home alone and without support services can capture older people's patterns of participation in daily occupations, thereby providing insight into some strategies that are facilitating their active aging. Despite acknowledged limitations, the study has shown that living at home provides older people opportunity to maintain personally meaningful routines and daily habits. Health care professionals should prioritize ensuring that older people living at home alone can continue to maintain their routines and habits once they require support services.

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