2015

Occupational engagement among community dwelling older people: a time-geographic perspective

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Publication Details
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Abstract
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Keywords
exploring, among, everyday, community, dwelling, older, people, time, geographic, perspective, occupational, engagement

Publication Details

This journal article is available at Research Online: http://ro.uow.edu.au/ahsri/289
Exploring everyday occupational engagement among community dwelling older people from a time-geographic perspective

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This manuscript is approved for publication by the co-author and is not under consideration for publication anywhere else.

Declaration of contribution of author and statement of conflict of interest
All authors have contributed to the analysis, interpretation and writing of the manuscript. The first author (IN) was responsible for the design of study and for collecting data. Declaration of interest: the authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.
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Declaration of sources of funding
This study was financially supported by The Swedish Foundation for International Cooperation in Research and Higher Education; the Swedish Research Council’s Linnaeus Grant, no. 2006-21576-36119-66; Bränholms Foundation; the Swedish Council for Working Life and Social Research; the Detlofs foundation and the Wikströms foundation. The financial sponsors did neither play any role in design, execution, analysis, interpretation of data nor in the writing of the study.

Statement of ethical approval
The study followed the Swedish Law on Ethical Review of Research involving Humans, with approval being granted by the ethical committee at Umeå University (dnr: 2010-242-32M), informed consent was obtained from each participant.
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Abstract
How older people spend their time in different occupations could contribute to our understanding of everyday life in healthy ageing. Objectives: This study adopted a time-geographic method and occupational perspective to explore the occupational engagement of community dwelling older people. The term occupational engagement encompasses what people do, where and with whom they spend their time, and the perceived level of competence and meaningfulness of their time use. Methods: Nineteen volunteers born between 1932-33, living alone in an urban area in northern Sweden and receiving no home-care services completed open time-geographic diaries for 5 days in May 2010. The diary data were analyzed using the Daily Life software program. Results: The study revealed the complexity and the diversity of the older people’s occupational engagement and that most of their time was spent alone in their home. The older people reported they were very good at doing almost half of the occupations in which they engaged and that their occupations were primarily either very meaningful or meaningful. Discussion: While some methodological limitations were identified, time-geographic studies of community dwelling older people living independently are considered to have potential to contribute to community and social planning for older people as they can provide interesting insights to older persons’ time use and occupational needs.

Keywords: older people, healthy ageing, occupational engagement
Introduction

Demographic trends such as the increase in the proportion of older people support useful and relevant research on healthy ageing as well as the development and implementation of strategies to support healthy ageing (Dahlin-Ivanoff, Gosman-Hedström et al. 2010). There exists a growing body of research that provides evidence on important aspects of healthy ageing. Among the findings often mentioned is the interrelationship between an active lifestyle and health (Mendes de Leon, Glass et al. 2003; O'Sullivan and Hocking 2006) but how to translate this evidence into practice is less known. Specifically meaningful occupations (Carlson, Clark et al. 1998; Swedish National Institute 2007), occupations that engage the person physically (Vogel, Brechat et al. 2009), socially (Sirven and Debrand 2008; Wahrendorf, Ribet et al. 2010) and challenge the person psychologically (Bowling 2008) have been identified as important for healthy ageing (Swedish National Institute 2007). However it is not known if there is an optimal level of occupational engagement each day to keep healthy, and methods to identify patterns of engagement are limited. This paper has its foundation in the basic human need for occupation and adopts an occupational perspective of health which views occupation as central to human life (Wilcock 2006). Occupation refers to something a person needs or wants to do (Fisher 2009), and includes all the things that people do to occupy their time (Townsend and Polatajko 2013). Occupational engagement encompasses what people do, where and with whom they spend their time, and the perceived level of competence and meaningfulness of their time use. Wilcock’s occupational perspective of health (2006) is relevant to health promotion, in its concern with enabling people to increase control over and to improve their health (World Health Organization 2009).

Interaction with the environment is crucial for engagement in occupation (Kielhofner 2008; Townsend and Polatajko 2013) as the environment shapes occupational form, performance and meaning. Occupational engagement is dependent upon different contexts. For example, geographical, physical, socio-cultural, political, institutional and economic contexts create demands and resources to which people must respond. Although such contexts have been
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shown to play an important role in occupational engagement (Rowles 1991), environmental press, that is when a person’s capacity in relation to the environmental demands creates barriers for an independent and socially rich life (Iwarsson, Horstmann et al. 2007), can impact negatively on his/her potential to maintain independence (Wahl, Fänge et al. 2009; Wahl, Schilling et al. 2009). Older people, especially those living alone, are at-risk of experiencing environmental press. Hence, studying occupational engagement requires a contextual perspective—a consideration of where the occupation takes place (Whiteford, Klomp et al. 2005).

There are different ways of undertaking studies to reveal patterns of occupational engagement and the composition of everyday life. Among existing quantitative methods the experience sampling method (ESM), time budget studies (Ujimoto 1990) and the time-geographic method (Ellegård 1999) are the most commonly used. The ESM is often described as a method that could reduce the amount of bias in self-recorded occupations, however it is seldom used as this method only provides an estimation of people’s everyday life, as the information is based on situations that have been randomly selected using a technical device. More commonly, time budget studies are used to describe and compare what people, groups and societies do. Many of the time budget studies rely on the assumption that time is a resource of which we all have the same amount and therefore use mean values for the time use to statistically describe groups or countries (Ellegård 1999). However, a time budget approach does not enable understanding of the relationships between different daily occupations or the experience of people’s occupational engagement. On the other hand, a time-geographic method, originally developed by Hägerstrand (Hägerstrand 1974; Ellegård 1999), is able to capture the arrangement of occupations in a person’s life and enable an understanding of the relationships between and reasons for the occupations, as it first considers the meaningful parts in the person’s life context (Ellegård 1999; Kroksmark, Nordell et al. 2006). Moreover, this method facilitates understanding of how the different occupational components interact on both the micro (personal) level as well as the macro (societal) level (Ellegård 2010). The time-geographic method therefore considers time and geography, as the name implies, as facets of the complexity of everyday life but also captures other components related to quality of everyday experiences such as
perceived meaningfulness. Therefore, this could be a useful method when studying patterns of occupational engagement with any group including older people.

A number of time budget studies have reported time use in later life (Lawton, Moss et al. 1995; Stanley 1995; Horgas, Wilms et al. 1998; Klumb and Baltes 1999; Fricke and Unsworth 2001; McKenna, Broome et al. 2007; Chilvers, Corr et al. 2010). While comparisons between these studies’ findings are difficult due to different classifications of occupations, they did reveal that a lot of time in later life is spent sleeping, while enjoyable occupations and instrumental activities of daily living (IADL) take up a large portion of the remaining time.

According to a literature search, no studies using the time-geographic method with a group of older people have been undertaken. As the authors thought that a time-geographic study could potentially complement the extant knowledge on how community dwelling older people spend time engaging in different occupations, contributing to our understanding of everyday life in healthy ageing, a small pilot study adopting a time-geographic method was undertaken in Sweden. The aim of this study was to evaluate occupational engagement among older people using a time-geographic method and to explore some benefits of using such a method.

**Methods**

*Context of the study*

This pilot study was the first cohort of a large ongoing health promotion intervention project for community dwelling older people in an urban area in northern Sweden, and started in May 2010. This intervention project was focusing on healthy ageing through occupational engagement and how to develop sustainable strategies for those occupations (Zingmark, Fisher et al. 2013). All those taking part in the pilot study were assigned to a group program in which they, among other things, were encouraged to describe their everyday occupations using a time-geographic diary (see Table 1). The participants in the group program also took part in discussions, sharing reflections from completing their diaries and comments on how to use any insights gained from the diary activity. The purpose of this group discussion was to increase the older people’s awareness of their everyday occupations, promoting
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reflections on their own occupational repertoires and consideration of how everyday doing impacted on their sense of wellbeing.

Participants
As the aim of the pilot study was to explore the use of the time-geographic method for understanding older people’s occupational engagement, those who in the first cohort of the intervention project (meaning those who completed the first group program), and who had completed time-geographic diaries in the group program, were invited to participate as volunteers in this pilot study by sharing an anonymous copy of their diary (approved by ethical board at Umeå University, 2010-242-32M). These participants were informed they would have continued access to any other services in the intervention project that might be available to them, regardless of whether or not they shared their diaries for the study.

In all, 24 older persons were invited to contribute their diaries to this pilot study. Nineteen of the 24 agreed. All of the 19 volunteers were born in either 1932 or 1933, were living in an urban area in northern Sweden, living alone in ordinary housing, not using home-care services and had no obvious cognitive or communicative problem. Potential problems with cognitive or communicative skills were assessed only through verbal conversation. The 19 participants consisted of 15 women and 4 men.

Procedures
The diaries used in the intervention project, and therefore in the pilot study, were open diaries, recommended by Ellegard (1999) when using the time-geographic method, as the individuals themselves self define their occupations and describe them in their own words. Using open diaries avoids the problem of participants being unable to find a suitable category for their particular occupation which arises when diaries use predefined categories from schemes of theoretically based occupations (Ellegård 1999; Chilvers, Corr et al. 2010). Also, when using an open time-geographic diary the occupational related time is in focus and those things performed guide the time entered in their diaries (Liedberg, Hesslestrand et al. 2004). This also means that the participants can report more than one occupation at the same time during the day.
The participants had been instructed in the use of the time-geographic diaries by an occupational therapist who also was the group leader in the intervention project. Filling in the diaries was a part of the ongoing intervention, a task that they were expected to complete between two of the weekly sessions. The instructions were given verbally in the group context. The participants were encouraged to report on their occupational engagement during any five, not necessarily sequential, self-chosen days. It was emphasised in the instructions that while they were free to choose any five days, it was important that the days chosen be regarded as typical. Furthermore, while encouraged to include as much detail as possible in their diaries, they could decide what sort of details to include and when to complete their diaries.

The diary consisted of sheets of paper and was completed using a pen. As per the instructions written on the diary pages, participants were required to include information about the social and geographic context of their occupations and to rate their perceived competence and the personal meaningfulness of each reported occupation. Also, they were asked to include both weekdays and weekend-days in their choice of days reported.

Data analysis

All diary data were coded and entered into the time-geographic soft-ware program Daily Life 2008 (Ellegård 2009) by the first author. The diaries of two women were excluded before analysis, as it was not possible to enter their data into the software program due to the way they had recorded their occupations. One woman only described the duration of reported occupations (without recording the time of the day) and the other woman wrote in her diaries one long story without recording the times or answering the questions related to competence, location and meaningfulness. A total of 81 completed daily diaries were made available for the pilot study. Fourteen participants had reported on five days. One
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participant reported on three days and two participants reported on four days each. No additional follow-up interview was included in the study.

All diaries were coded in accordance with the time-geographic program manual so that each occupation reported was given a unique code. The software program made it possible to summarize the time use and produce frequency tables as well as graphs showing each participant’s total daily occupational engagement. This part of the analysis focused on the various occupations engaged in by each individual, where they were undertaken, with whom, how well it was done and the personal meaningfulness of the occupation. To be able to generate an understanding of the whole group’s level of occupational engagement, all time frequencies were thereafter exported to SPSS (SPSS Statistics 2011) for descriptive analysis of the whole group data. As each person was free to choose what and how much to report in the diaries there was variance in the amount of time recorded. Therefore, the total reported time (TRT) was calculated in hours then the mean time was calculated by dividing the TRT by the total number of participants. This calculation was repeated for every occupation reported.

Results

The findings will be presented in three parts. The first part pertains to individual participants in the study while the second part relates to diversity of the reported occupations when considered from a group perspective and the last part concerns the characteristics of the occupations.

Complexity of occupations reported by individuals

Figure 1 is an example of a colour coded graph generated by the Daily Life software program depicting one day’s occupational engagement of a female participant occupied inside her home, taking care of herself (instrumental ADL), and engaged in home maintenance and leisure related occupations, such as taking care of plants. She was also occupied during the day listening to the news and making a telephone call. The graph shows that in the morning the female participant engaged in occupations she perceived as meaningful or very
meaningful. It also shows that she felt least competent taking care of plants (rated fair). During the morning she also was engaged in parallel occupations. For example, she reported in her diary that at the same time as having her lunch she was also sun-bathing. This pattern of engaging in parallel occupations continued later in the day, especially during meals.

On this particular day the female participant stayed in or around the house until 3pm in the afternoon, at which time she went to the store (see Figure 1). The graph reveals that later in the day she travelled from home on her bicycle to have dinner with family, returning home in the evening at 8.30 pm. Interestingly, this woman’s reported schedule of occupations on this day was dissimilar to the majority of study participants who reported staying in or around the home, doing things alone and rarely going out in the evenings.

Another example of an interwoven occupational life is provided by the second graph (see Figure 2) which reveals occupational patterns that were common among the majority of participants. This graph shows that the participant is alone the whole day, doing tasks that are mostly perceived as meaningful (except for having dinner and making a telephone call in the afternoon). During most of the day the participant is doing parallel occupations. Primarily she is doing home maintenance inside and outside the house or taking care of her husband’s grave (see Figure 2).

The diversity of the reported occupations from a group perspective
Analysis of all the time-geographic diaries highlighted the diversity of the occupations in which the participants engaged. Collectively, the 17 participants reported on 145 different occupations during 2536 hours (152170 minutes) of engagement (which will now be referred to as total reported time (TRT). The number of hours of engagement reported by
each participant ranged from 59 hours to 252 hours ($M^1 = 149$ hours). The number of occupations reported by the participants ranged from 7 to 46. On average, 12 per cent of the time was reported as engaging in occupations such as *sleeping* or *resting* (9.8 per cent and 2 per cent respectively) and another three per cent was spent engaging in occupations related to *personal hygiene*. However, there were only 16 participants who reported the occupations *sleep* or *rest* and 12 participants recorded occupations related to *personal hygiene*. Occupations related to *eating* and *meals* occupied on average 18 per cent of the participants’ time where *eating* was the predominant occupation (14 per cent) and *preparing meals*, *cooking* and *working after meal* for example, washing the dishes, covered the rest of the time (4 per cent).

Of the reported time, on average 1.5 per cent was occupied by *physical exercise* and 3.3 per cent occupied by *walking* or *strolling*. Out of the 17 older participants, seven reported engaging in *physical exercise* and 13 reported they went *walking* or *strolling*. All participants except one reported using some form of *transportation* during the five days. The most common means of transportation was *going by bike* ($n$:8) or *car* ($n$:5).

*Household occupations* like *cleaning*, *doing the laundry* and *maintenance* occupied on average 6.5 per cent of the time. All except two participants reported household occupations. *Garden-related occupations* occupied 4 per cent of the time, and ten participants reported these kinds of occupations. All except one participant reported engaging in *social occupations*, such as *telephoning*, *having guests*, *talking/chatting*, with 7 per cent of the time being spent in *social occupations*. *Being a visitor* was the predominant type of occupation reported in the social category.

The most frequently reported occupations were hobbies, that is, leisure pursuits engaged in for relaxation. Such occupations occupied on average 27 per cent of the time. Some examples of hobby occupations were: *reading newspaper and books* (reported by 14 participants and occupying 7.5 per cent of the time), *doing crosswords* (reported by 9

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1 $M$ is the abbreviation for mean value.
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participants and occupying 2.5 per cent of the time; Internet-related occupations (reported by 5 participants and occupying 2 per cent of the time) and watching TV (reported by 14 participants and occupying 11 per cent of the time). Among those who reported that they watched TV, three participants spent 20 per cent or more of their personal reported time in front of the TV. One participant spent 25.4 per cent of personal reported time watching TV. This participant also reported that he/she was doing nothing particular during 2.5 per cent of the time.

The characteristics and contexts of the reported occupations

Some occupations reported by the participants were not pre-coded in the data program. Therefore it was necessary to add to the existing list of activity-codes (in the soft-ware program) to include occupations that were specifically reported by this group such as “doing cross-words” and “taking care of grave”. Another example of an occupation that was not listed previously was the reported occupation “go downtown” (in Swedish: gå pâ stan) which, in this specific cultural context, means strolling in the city area, maybe doing some shopping but mostly window shopping and perhaps meeting friends.

In terms of geographic context, the diaries revealed the participants were spending most of their time at home (65 per cent) or close to home (3 per cent). The participants reported being at a family member’s or friends’ place for an average of 8.5 per cent of the total reported time (reported by 13 participants), primarily at a friend’s place. Being at the countryside occupied 8.8 per cent of the total reported time. During 2.5 per cent of the total reported time, the participants reported visiting stores (reported by 11 participants) or were downtown (3.1 per cent). The participants also reported other settings, for example, being in a forest, at a workout place and at places for treatment.

In relation to social context, the study revealed the participants spent 81 per cent of the total reported time alone. One participant reported spending all the reported time alone. Eleven of the participants reported 80 per cent or more of their total reported time was spent alone and none of the participants reported spending less than 70 per cent of their time alone. Spending time with family occupied on average 10 per cent of time (reported by
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15 participants) and time with friends occupied 7 per cent of their time (reported by 13 participants).

On average, for more than three quarters of the time (79 per cent), the participants reported themselves as being very good or good at doing those occupations recorded (34 and 45 per cent respectively). The participants recorded being very bad at doing the reported occupations for 1.3 per cent of their time. The occupations that occupied 90 per cent of the participants’ time were reported to be very meaningful (47 per cent) or meaningful (43 per cent). Totally meaningless occupations occupied less than 1 per cent of their time. Examples of those meaningless occupations were lazy-watching TV, vacuuming or having a junk meal.

**Discussion**

This study demonstrates how the time-geographic method can contribute to an understanding of the complexity of occupational engagement. Having analysed the data gathered from using this method, we can conclude that the study participants occupy their time and space with meaningful occupations in which they perceive themselves competent. Furthermore, although many similarities in the occupational engagement e.g., spending time alone and at home were identified, the study results also highlight the variation in the occupational engagement of a group of community dwelling older people. The graphs produced by the Daily Life software program illustrate this complexity as well as provide important additional information about what healthy older people do in relation to different contexts. However, the name of the method, time-geographic method, could be confusing for the reader as the geographic element is only one of various elements of occupational engagement that this method can be used to gather. Instead, the method incorporates many elements and consequently, it can contribute to a broad understanding of the everyday life of older people.

What people do on a daily basis is not only dependent on their capacities but is also influenced by the interactions between the people and their various contexts, for example,
public policy, legislations, sociocultural values (Townsend and Polatajko 2013). A time-geographic method can highlight how older people compose their everyday occupations and what contexts facilitate or hinder their occupational engagement. By recognizing this, strengthening of strategic community actions could be suggested (Wilcock and Hocking 2004), actions that could potentially contribute to health promotion (World Health Organization 1986).

From the geographical perspective and similar to previous time-budget studies of older people, this study confirms earlier findings that older people spend most time at home doing things alone (Horgas, Wilms et al. 1998; Fricke and Unsworth 2001; McKenna, Broome et al. 2007). However, the participants in this study only reported sleeping or resting and personal hygiene for 15 per cent of their time. In other studies with similar groups (Stanley 1995; Fricke and Unsworth 2001; McKenna, Broome et al. 2007), such occupations have occupied most of older people’s time. These differences should, however, be viewed in the light of the chosen methodology. In this study adopting the time-geographic method, participants were not directed to record occupations in relation to a given time. Instead, they decided what to record. We do not know if the participants reported all occupations in which they engaged, and if not, why they did not report certain occupations. It is possible that the participants took some more basic occupations for granted and/or considered them not important enough to report. Perhaps they were too embarrassed to record occupations that they felt were very personal? Based on data from other studies (Stanley 1995; Fricke and Unsworth 2001; McKenna, Broome et al. 2007), a qualified guess is that the participants in this study did sleep more than 10 per cent of the time reported but they found other occupations more interesting to report. If so, this methodology could be a useful means of understanding the pattern of subjectively important occupations which is considered influential in healthy ageing (Swedish National Institute 2007). This method could consequently be a helpful tool for individuals, raising their awareness of their personal, natural occupational needs, and providing an opportunity to reflect on daily occupational engagement. For the broader community the method could support development of strategies to promote wellbeing by occupation in accord with the needs of the population. Furthermore, this fits well with the World Health Organization’s (WHO) guidelines for
healthy living which they propose actions to enable life-long learning and to give opportunities for preparing for changes across life span and to cope with possible challenges that might occur. For communities these guidelines promote concrete and effective community actions and strategies to strengthen public participation in health matters (World Health Organization 2009).

In this study, the participants commonly reported that they were occupied with parallel occupations. This can be seen as very normal, as we can all do more than one thing at a time for example, we have a chat about the day while we are cooking our dinner. Interestingly, other studies using a time-geographic method have not described this phenomenon. However, these findings should be treated with some caution as although some occupations have been recorded in the same time slot, and therefore considered here as parallel when they may have, in reality, they have been carried out consecutively. Alsaker et al (2006) came to the conclusion that such parallel occupations occur in real life, but that it was not possible to detect them using this method, due to a limitation of the methodology. Our conclusion is that the software program used in this study, Daily Life 2008 (Ellegård 2009), can manage parallel occupations but that this can also be a problem as some people report far more than 24 hours in a day.

The participants reported that they were involved in many occupations of a physical nature during their reported days; they exercised, took walks, did gardening, and took care of the house. These particular occupations occupied about 15 per cent of their reported time. Physical activity is considered crucial for healthy ageing (Vogel, Brechat et al. 2009) and through this methodology the different types and range of occupations that were primarily physical could be identified. The amount of time recorded doing physical occupations needs to be understood in the light of culture and climate, as yet a relatively unexplored area of research (Pereira 2009; Blijevens 2010). This study was carried out in the springtime when Swedes are very keen to be outdoors, especially if a cold winter has kept them indoors for long periods. Therefore, it is not known if outdoor physical occupations would have been reported to the same extent by another group of older people who were recording their occupations during another season. Furthermore, from other studies we know that older
people tend to fulfil norms in society (Nilsson, Lundgren et al. 2012). One common norm in Sweden is to be active and so perhaps the participants felt it was important to report physical occupations in their diaries.

The results from this time-geographic study reveal the time the participants were engaged in different occupations. The results also create a broad understanding of how different contexts together with different occupations contribute to the complexity of occupational engagement. By examining the results we can conclude that the participants spent most of their time doing meaningful things and doing things they felt competent to do. On the whole, the study revealed that the participants engaged in well-known occupations, in their own homes, and mostly on their own. This method gives an understanding of the geographic context but can be limited in cases like the virtual geographic context, where some participants spent their reported time using the Internet, a limitation explored in more detail by Yu and Shih-Lung (2007). Those participants in this study who reported being occupied on the Internet could for example be communicating with others through social media even though they reported themselves as alone. Also, in a virtual sense they could be in places other than at home as reported. It would be an interesting challenge to develop further understanding of virtual contexts in future studies.

Based on the results of this study, time-geographic methods can be used to raise awareness of how older people choose to live their lives and could therefore be used as a therapeutic and pedagogic tool when working with older people for the purpose of considering potential lifestyle changes to obtain a desired or preferred occupational repertoire. Completing the diaries, discussing what is reported and looking at the computer created graphs could be useful for highlighting an individual’s occupational pattern. Furthermore, it is possible to consider this method not only appropriate to use both for personal change (on an individual level) but also for understanding everyday life and occupational needs on a group level. Therefore, this method could be used in planning social or community services to meet the needs of older people living alone. The way of composing one’s life not only shows what a person is doing but also who he or she is and wants to be. In the light of doing, being and
becoming (Wilcock, 2006) and as total occupational lifestyle might have an impact on our health, the time-geographic method can be a way to highlight this perspective.

The results from this study might have been influenced by the fact that the participants were selected from a group that was already included in an intervention project with a focus on occupation and health. Furthermore, the results might also have been influenced by the demographic characteristics of the participants, as they were all urban, single living, in a certain age span and from fairly similar social class. Although the participants had been given verbal instructions as well as an opportunity to practice filling out the diaries, some of the diaries submitted could not be included in the study as the required format had not been followed. Based on these experiences, potential modifications to how the diaries are completed could be identified. We recommend that in future studies there should be more emphasis on the instructions for filling in the diaries. Potential participants could be asked to complete one day of their diary, and have it checked by the researchers before continuing to document the other days.

Finally, the time-geographic method used in this study does have limitations. People with poor writing skills or whose first language is different to that of the researcher and the language used in the diaries may have problems completing the diaries. Perhaps writing assistants or interpreters could be used to enable participants to overcome these limitations.

**Conclusion**

The pilot study reported in this paper has revealed that the time-geographic method can provide a broad understanding of the occupational engagement of a group of community dwelling older people living at home alone. The study findings revealed that although there were similarities in occupational engagement, the heterogeneity of occupational life of the participants is nevertheless impressive. Not only were many different occupations reported, but there was also a great variation in the number of occupations each participant reported. In addition, analysis of the diary data also revealed that this particular group of community dwelling older people primarily engage in occupations alone and spend most time close to
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home. Although it is not possible to ascertain if the context and circumstances of their occupational engagement were of their own choice, we do know that most of their occupations were meaningful and that the persons believed that they were good at what they did.

Acknowledgements
The authors wish to thank the older people that generously shared their diaries for the purpose of this study and also Professor Kajsa Ellegård for support with the data program.
References


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Table 1. Example taken from a section of one submitted diary. The first row includes the questions and the choice of variables.

<table>
<thead>
<tr>
<th>Time (Describe the starting time)</th>
<th>What did you do? (Write down what you did do during this time. Be as detailed as possible)</th>
<th>Together with whom?</th>
<th>Where were you?</th>
<th>I perceive my competence in this as</th>
<th>I perceive this as</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1) Alone</td>
<td>1) Inside home</td>
<td>1) Very good</td>
<td>1) Very meaningful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) With a friend</td>
<td>2) Outdoor home</td>
<td>2) Good</td>
<td>2) Meaningful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) With my family</td>
<td>3) In other parts of the city</td>
<td>3) Fair</td>
<td>3) Neither meaningful or not</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4) With others</td>
<td>4) In another city/country</td>
<td>4) Bad</td>
<td>4) Something I rather do not do</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5) Really bad</td>
<td>5) Waste of time</td>
</tr>
</tbody>
</table>

8.30  Get up and make myself breakfast 1 1 2 2
09.15 Clean up after breakfast, take a shower and put on my clothes 1 1 2 2
09.45 Make some mailing and telephone calls 1 1 2 2
10.40 Taking the bus to the city 1 3 2 2
11.00 Host at a theatre 4 3 1 1
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Figure 1. A graph to visualize one of the days reported by a participant. The graph shows the interrelation between the occupation (red), where it took place (green), the reported personal competence in doing (dark blue), the perception of meaningfulness of the occupation (turquoise) and with whom she engaged (purple). Time is represented on the vertical axis. The horizontal axis relates to the different categories of occupations, as coded in the Daily Life program.
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Figure 2. Another graph to visualize one of the days reported by a participant. The graph shows the interrelation between the occupation (red), where it took place (green), the reported personal competence in doing (dark blue), the perception of meaningfulness of the occupation (turquoise) and with whom she engaged (purple). Time is represented on the vertical axis. The horizontal axis relates to the different categories of occupations, as coded in the Daily Life program.