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The Importance of successful place integration for perceived health in very old age: a qualitative meta-synthesis

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Abstract

Objective: The aim of this study was to increase our understanding of the multifaceted phenomenon of home and health, by exploring processes underlying these dynamics when living at home in very old age. **Method:** A qualitative meta-synthesis was used on four complementary qualitative studies, based on data from the Swedish ENABLE-AGE In-depth Study, focusing on very old, single-living people's experiences of home in relation to participation, independence and health (N=40). **Results:** Over time, very old people manage increased frailty by means of three intertwined processes concerning changes in everyday life; The turning-points, The struggle and The negotiations. The findings show that these processes take place through the context of the Homelike functional home and a state of mind labelled, The awareness of frailty. **Conclusion:** The results can be useful in constructing and implementing guidelines for more holistic approaches to housing provision for senior citizens. Further, the study delivers a deeper understanding about how very old people live their lives, useful for practitioners as well as it contributes to theory development within the context of ageing and environments.

Keywords: Home, ENABLE-AGE, environmental gerontology, everyday life, meaningful activity, occupational therapy

Introduction

There is sparse theoretical and empirical knowledge about the dynamics of the changing everyday lives of very old people living at home, and a deeper understanding in this respect is called for. It is specifically important to generate a more thorough understanding of the multifaceted phenomenon of home and health, and how it is related to participation in meaningful activities. It is well known that despite increased frailty, most people wish to remain in their own homes as they grow older. This is also actually the case in Sweden and other European countries, where the ideological and political idea of ageing in place is dominant (Bookman 2008; Mitty and Flores 2008). However, very old people aging in place constantly face changes in their everyday life.

Within the field of health promotion, health is viewed as a resource to handle changes in everyday life (Hartig and Lawrence 2003). Historically, housing and health has been an important topic in public health, for example investigating mortality and morbidity in developing countries. While currently mostly neglected in public health research in developed countries, there is still a need for investigating housing in relation to health (Lawrence 2010). Even if such issues have been put forward (Iwarsson 1997; Wahl et al. 2009) and housing provision for senior citizens is a burning issue, there is still lack of knowledge about how aspects of housing affect ageing especially with regard to understanding of the dynamics of home and health in old and very old age.

The dynamics of the interactions between ageing persons and different contexts is a central theme engaging researchers in interdisciplinary projects (Christiansen et al. 2005; Townsend and Polatajko 2007; Wahl and Gitlin 2006; Wahl et al. 2003). Already decades ago Rowles (1983) and Rubinstein (1989) identified the classic concepts of place meaning, place

attachment and place identity. In addition, based on extensive qualitative data collected in the ENABLE-AGE Project, our previous studies in this area have shown that home is a place of meaning (Dahlin-Ivanoff et al. 2007) and perceived as an important place linked to self-perceived health in very old age (Fänge and Dahlin-Ivanoff 2009). Health was described in terms of being able to manage daily activities at home and to participate in society. Managing daily activities supports experiences of independence (Haak, Fänge et al. 2007) and is strongly linked to very old people's homes. When studying the relation between home and participation (Haak, Dahlin Ivanoff et al. 2007), it was found that along the process of ageing, participation changes from taking part in and performing more physically and mentally demanding activities to the performance of less strenuous activities. Hence, out-of-home activities are successively replaced with activities performed within the home. The role of the home is transformed from being more of an origin for out-of-home activities to being the main locus for the majority of activities that takes place in the everyday life of very old people. Very old people want to remain at home as long as possible, and they want to be active in their everyday lives and participate in society on their own terms (Dahlin-Ivanoff et al 2007; Haak, Fänge et al. 2007, Haak, Dahlin-Ivanoff et al. 2007; Mollenkopf et al. 1997; Valdemarsson et al. 2005). Summing up on this research, healthy ageing is a much more complex issue than just the possibility to remain at home. More studies targeting relations between the home and the very old person would contribute both to the theoretical and empirical understanding of this under-researched area.

This type of research needs can be targeted by studies applying a qualitative approach. However, such studies are most often limited in scope and build upon the notion of an inductive approach to generation of knowledge. While hitherto not often seen, based on a set of qualitative studies, deeper knowledge could be developed. Accordingly, by applying a

qualitative meta-synthesis approach to studies exploring very old people's own experience of the home in relation to participation, independence and health, the ambition of this study was to contribute to a deeper theoretical and empirical understanding of such dynamics. More specifically, the aim was to provide a deeper understanding of the transactions between the person, the home environment, and meaningful activities by exploring processes underlying the phenomenon of home and health in very old age.

Methods

Our ambition to the analysis approach was as inductively as possible. That is, the empirical results laid the ground for and are reflected in the results section. New theory is not the result of individual studies alone, though theory development emerges from substantive levels to more formal ones (Glaser and Strauss, 1967). When incorporating qualitative studies exploring closely related phenomena, qualitative meta-synthesis is a helpful method. In a meta-synthesis the authors' interpretation of the original findings is not just a summary, neither a secondary analysis of the primary raw data. When synthesising qualitative research studies, new relationships including themes and categories emerge out of the original studies. This result appears through thorough analyses including comparisons and translations of those original findings, to produce new interpretations that encompass the meanings of the included studies (Jensen and Allen 1996). Thus, in order to make qualitative findings more accessible for application in practice, the goals of qualitative meta-synthesis are theory development, higher level abstraction and generalisability (Jensen and Allen 1996; Sandelowski et al. 1997).

Project context

The ENABLE-AGE Project included 1, 918 very old people from Sweden, Germany, the United Kingdom, Hungary, and Latvia (Iwarsson et al. 2005). Out of those, a sub-sample of 40 participants in each country was selected for the qualitative ENABLE-AGE In-Depth Study. In the Swedish part of this study, all 40 participants (17 men and 23 women) were between 80 and 89 years of age (median = 85 years). There was an ambition to have as much diversity as possible in the sample (Patton 2002) in terms of sex, age, type of dwelling, and self-rated health. Furthermore, diversity in terms of dependence on another person in activities of daily living (ADLs) (Sonn and Åsberg 1991), magnitude of accessibility problems in the home (Iwarsson and Slaug, 2010), and whether the participants were engaged in club activities was also desired. Such information was at hand within the ENABLE-AGE Project (Iwarsson et al. 2007).

The purpose of the ENABLE-AGE In-Depth Study was to reveal a deeper understanding of the meaning of home, autonomy, health and well-being, as well as participation in very old age. In Sweden, in order to explore the key concepts in sufficient depth and to utilize the richness of the dataset, after completion of the interview process and the first step of the analysis, it was considered necessary to accomplish four separate analysis processes. The qualitative approach of the four papers was inspired by grounded theory (Glaser and Strauss 1967; Strauss and Corbin 1990) as described by Charmaz (2006). Each analysis process resulted in one paper, each focusing on one of the key concepts of the study, i.e. independence, participation, meaning of home and the relationships between home and health.

Sample for the meta-synthesis

This paper is the result of a qualitative meta-synthesis of the four complementary qualitative studies (Haak, Dahlin Ivanoff et al. 2007; Haak, Fänge et al. 2007; Dahlin-Ivanoff et al. 2007;

Fänge and Dahlin Ivanoff 2009) that all arose from the Swedish part of the ENABLE-AGE In-depth Study.

Meta-synthesis procedure and data analysis

The analysis for the current study was guided by Paterson and co-workers' (2001) recommendations of how to conduct a meta-synthesis. First of all, the focus for the analysis and the research questions to be asked were decided on. Thereafter, data such as specific findings related to the phenomenon of interest were coded, categorized and reinterpreted. More specifically, the analysis process evolved as follows: Each study was read in detail, and the findings corresponding to the study focus and research questions were highlighted. In an initial phase of the data analysis, the raw data in each primary paper were compared and contrasted with data from the other papers included in the sample for the meta-synthesis. Notes were made about the concepts, categories and phrases that best described the phenomenon of home and health. During iterative rounds of discussions among the authors, translations were made, new codes emerged, interconnections were explored and the codes were sorted into new categories. Toward the end of the analysis inter-relationships among categories, and three processes articulating the complex phenomenon of home and health emerged. In addition, the findings were discussed not only within the author team but also at workshops including experienced researchers in the field. Examples of issues that arose during these workshops were discussions on emerging structures and themes. After yet another round of discussion in the author team, the first author revised the findings once more, followed by final reading and commenting by the three co-authors. All the steps taken together, the analysis evolved as a dynamic and iterative process of reflecting, interpreting and theorizing that resulted in a deeper understanding of the phenomenon of home and health.

Results

The results showed that three intertwined processes take place in the context of the *Homelike functional home* with the *Awareness of frailty* as a state of mind. It was apparent that in order to create meanings in everyday life, over time the very old participants make use of three intertwined processes in order to maintain stability and facilitate changes in their lives; *The turning-points*, *The struggle* and *The negotiations*. In a constantly evolving transactional process, involving the context of the functional home and the awareness of their frailty as a state of mind, these three processes take place aiming at maintaining participation, independence and health in the own home.

The context of the homelike functional home

The result showed that the participants' major living space is the home and that this is the scene where most things in their lives happen. They stated that it is important to have a home that is familiar, meaningful and secure, which signifies autonomy, independence and participation, thus linked to self-perceived health. According to the participants, "a homelike functional home" is important as it supports routines, habits and meaningful daily activities, still performed with personal satisfaction. The feeling of what a home is grows during the years as events occur. The home was not only referred to as a place that in a physical sense enhances autonomy and participation; it was seen as a place imbued with personal meaning. The home looks the way one wants it to look and personal things create a familiar setting full of memories. It is a place to be together with other people in, in familiar situations on one's own conditions. Thus, the participants identified themselves with their home, and they to a large extent used the home as an extension of themselves.

The awareness of frailty as a state of mind

The participants were very well aware of their own frailty and their vulnerable situation. The fact that they knew that their life situation could change rapidly influenced their perception of health. They clearly articulated that no matter what stage of functional decline they reached, it would still be important to be an independent person participating in daily life at home. Moreover, their perception of health was compared to the health of other people of the same age and in the same situation. They were aware of that they could not expect themselves to be as fit as younger people, and thus, they lowered their expectations on their own health. On the other hand, by comparing themselves to people with worse health, they strove for the achievement of a positive picture on the own state of health. By being aware of their frailty and by comparing themselves to other people, they cognitively and emotionally prepared themselves for minor or major life changes that might occur. The participants expressed a strong inner driving force to maintain health, despite declining functional capacity by means of preparing for changes and take action within their own home.

Three intertwined processes

The three intertwined processes that take place within the context of the functional home and the awareness of frailty as a state of mind do not appear in a chronological and linear order. Instead, they appeared as continuous ongoing processes transacting with each other and with the context, thus leading to the creation of new meanings in everyday life.

The turning-points

Along the process of ageing, the participants reached certain turning-points where it was no longer possible to keep on as before. For example, health decline might lead to a loss of the capacity needed to be able to maintain meaningful and highly valued activities, or a forced or carefully planned relocation. Meaningful activities, in which the participants were actively

involved since long, might have to be changed to activities where they instead took the role as a spectator. Participation might also change, from out-of-home activities to participation in within-the-home activities. These turning-points were constantly affecting how the very old person took action, in order to avoid or to face and accept these changes. The participants were constantly aware of that they sooner or later may come to a point in time where they had to e.g. relocate or to acquire home-help services in order to be able to stay in their own home. The perception and experience of a turning-point was not always about taking action; it appeared as a cognitive process consisting of psychological as well as social and physical dimensions. In this respect, turning-points should not only be negatively conceived; instead, they may very well result in positive changes that create new meanings and enrich everyday life.

The struggle

The participants experienced a continuous struggle in order to participate in meaningful activities in the same way as before. Being successful in this respect contributed to a preserved picture of being an independent, healthy person whom participates in life according to one's own conditions and personal satisfaction. During this process, the participants tried to keep up the balance between their own frailty, their demands on themselves and from others, as well as demands from the home environment and the activities they needed or wished to participate in. To be acquainted with the environment, as in having close and easy access to the things most needed in daily life, such as shops, healthcare and social services, etc., generated a feeling of security and convenience, and facilitated the struggle to stay independent. Thus, the participants struggled to their outmost limit in order to avoid the experience of decreased participation and dependence in daily life at home.

The negotiations

With increasing frailty that was not easily influenced by changing the context, a process of negotiation concerning what was worth struggling for or not took place. In order to be able to perform activities differently but still autonomously, the participants continuously negotiated with themselves concerning possible reorganizing and adaptation of activities, as well as of their home. Through such negotiations different courses of actions were created, all in order to maintain autonomy and the ability to perform and participate in meaningful, highly valued activities. In relation to this, the participants also negotiated about which activities they accepted or preferred to receive help with in order to preserve an independent, participatory daily life at home. For example, they negotiated about at what point in time they were frail enough to demand home help service, assistive devices, or when a move to sheltered housing would be unavoidable. All these things reminded them about their own frailty and are obvious significations of ageing and health decline.

Discussion

The results of this study generated new knowledge and insight with potential to support the development of public health activities targeting very old people. Most important are the constant transaction between the context, the state of mind of very old people and three inter-related processes described. In particular, the concept of turning-points in life seems to be highly important. The awareness of such turning-points affected cognitive, emotional and physical processes that resulted in struggle and negotiation, thus leading up to different actions to deal with the consequences of the process of ageing.

From a theoretical perspective, links to several existing theories can be seen. Obviously, the results of the meta synthesis conceptualize the processes of place integration as described by

Cutchin (2003, 2004). Place integration conceptualizes how very old people, through their activities, are integrated with their homes in an ongoing changing and transactional process (Cutchin 2004; Dickie et al. 2006). It is an idea that emerged from Dewey's philosophy of human experience (see e.g. Campbell 1995; Dewey 1989). According to Dewey (1989), there are always upcoming challenges in everyday life which may interfere with the person-place relationship. The problems that occur stimulate personal creative thoughts and actions which hopefully result in a re-integration of the interfered situation. Place integration embraces the places in which people live and spend their everyday life, and to be able to understand a person's actions, it is necessary to consider the context through which the person lives his/her life. The concept of place integration illustrates how a person, while facing challenges in daily life, by means of participation in meaningful activities is integrated with the home (Cutchin 2001). Moreover, place integration acknowledges the constant instability among older people in terms of increasing frailty, and how this affects all actions taken within the context of their place of living (Cutchin 2004). These actions are the results of the struggle to maintain the current level of independence, as well as the negotiations of what is important or not important in life (Cutchin 2003). Thus, while labelled differently than in Cutchin's model, based on a rich empirical material our findings are well in line with the notion of place integration.

Turning to other theories that reflect the type of dynamics revealed by the results of the present study, also Baltes and Baltes' (1990) model of Selection, Optimization, and Compensation (SOC) deserves attention. While the SOC model does not highlight the importance of meaningful activities in everyday life but rather adaptation to the environment, our results touch upon such aspects. That is, depending on individual and societal conditions, the process of selective optimization with compensation can take many forms in content and

timing. Yet another model worth reflecting upon in this context is Wahl and Oswald's (2010) conceptual framework on "agency" and "belonging". By and large, all three processes fit into the behavioural arm of the model and thus, add more specific and fine-tuned empirical facets of what really happens in terms of ageing in place.

However, in none of the theories referred to above the process we denoted turning-points has been described in relation to place integration. Turning-points seem to govern the struggle and negotiation processes, and thus seem to be crucial for place integration. How the person experiences such turning points in time and space, and how he/she acts in relation to them is a result of the social and cultural demands posed upon the older person (Bennett 2010), but also a result of personal preferences and motivation (Iwarsson et al 2007; Nygren et al 2007; Oswald et al 2007). Further, turning-points are always related to some sort of health issue even though it is expressed in for example terms of social events or environmental change. Findings in the same direction were recently described in Fernandez-Ballesteros and co-workers' research on "ageing well" (2010). Depending on how people adapt to declining health and their individual possibilities for participation in life-course transitions of later life, result in new personal meanings. Another example of research where the notion of turning-points was identified is a recent study on relocation in old age (Nygren and Iwarsson 2009), indicating the validity of our finding as an important mechanism along the process of ageing.

The present meta-synthesis revealed that, through a variety of meaningful activities the very old people's home and perceived health are connected and intertwined in dynamic and complex situations. In other words it is through activities that coherent meaning of experiences of doing in the home is created. However, in order to take concepts and theories on person-environment-activity transactions one step further, the characteristics of the activities creating meaning for the person need to be acknowledged (Leufstadius et al. 2008;

Persson et al. 2001). In this context, the issue of structure and routines within the home for very old people are important to consider. Given the fact that structure and routines form strong relationships between place and people (Cutchin 2003), they contribute to successful place integration.

As elucidated by the current study, the transaction between home and health in very old age is complex and deserves further attention. While recent definitions of public health include the fact that environments are important for health research questions of housing and health are seldom considered (Lawrence 2010). In order to move research on home and health in old age forward, it should be fruitful to build new alliances between the area of housing and public health. A crucial question here is, for example, how home environments should be designed to engage people in positive health behaviours. Lifestyle change issues must include environmental conditions, which can support or hinder the implementation of preventative measures and health behaviours at large. Thus, as exemplified by the current study we need more research which adds to the important connection of environments and public health issues and outcomes (Wahl et al. 2010).

The strength of a meta-synthesis is the telling of a new story through a rigorous description and translation process with a result that have stronger impact than each of the included studies alone would have (Zimmer, 2006). A limitation of this study might be the decision to base the meta-synthesis on a specific sample of just four studies, involving the same sample of 40 very old people in one country (Sweden). Though, to the best of our knowledge this is the first meta-synthesis study based on four interrelated qualitative papers on home and health, thus, this study contributes to methodological developments within this field. If more studies had been included, additional insights into the phenomenon on ageing at home might

have emerged. However, one problem when conducting meta-synthesis is the variation of methodologies used in different studies. Such variations lead to the loss of detailed descriptions that validate the quality of the original studies, and therefore put the quality of the meta-synthesis findings at risk. In this respect, the present study has the advantage that grounded theory as described by Charmaz (2006) was applied in all four studies included. Grounded theory focuses on human social processes and on inductive theory generation (Glaser and Strauss 1967). Thus translations between findings is facilitated and considered as a methodological advantage in our study. Moreover, the author constellation of the current paper is the same as of the four studies included in the sample. According to Paterson (2001), when authors conduct meta-synthesis on studies other than their own, there is a risk of losing valuable insights emerging from the analytic steps of meta-synthesis.

In conclusion, our results support a place integration perspective and have potential to support the much needed theoretical development for studies of home and health dynamics in very old age. This study contributes to our understanding of the ongoing processes underlying place integration at home in very old age. The results show how very old people adapt to everyday changes and that a deeper understanding of ageing in place could be attained by an awareness of the complexity of several intertwined processes leading to creations of new meanings as circumstances change. The results can be useful in constructing and implementing guidelines for more holistic approaches to housing provision for senior citizens. Further, the study delivers a deeper understanding about how very old people live their lives, useful for practitioners as well as it contributes to theory development within the context of ageing and environments.

Ethical standards

The ENABLE-AGE project was approved by the Ethical committee, Lund University, Sweden.

Conflict of interest

The authors declare that they have no conflict of interest.

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