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OLDER PEOPLE'S HOME MODIFICATION PROCESS

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ABSTRACT

The overall aim of the thesis was to provide theoretical and empirical knowledge of interactions involved in the encounters between older persons experiencing activity limitations in their home environments and the service organisation related to home modification services, in the context of one Swedish municipality. A transactional perspective was used, meaning that the focus was on driving forces and relationships connecting different aspects and actors involved in older people's encounters with the service organisation related to home modification services. Four studies were included in the thesis. Different designs were chosen in the four studies to get a comprehensive understanding of older people's home modification processes. The designs included explorative quantitative design, case study design, longitudinal in-depth interview study and critical discourse study. Findings from all studies were ultimately integrated and analysed, using the concepts of place integration and practical rationalities as theoretical tools for analysis. A general finding from the studies was that the older persons' aspiration to create possibilities for action was a strong driving force throughout their home modification processes. An additional general finding was that the strategies used to create possibilities for action were expressions of practical rationalities resulting from relationships between the older persons' values and their experienced scopes of action. The findings also demonstrate how the relationship between older people's practical rationalities and different professionals' practical rationalities directed the home modification process through a process of negotiations. A conclusion from this thesis is that an approach that recognises the changing characters of older people's ongoing lives and their interconnectedness to the service organisation is needed to provide home modification services that meet needs satisfactorily and are empowering to older persons experiencing activity limitations in their homes.

Key words: ageing in place, agency, client-centred, empowerment, possibilities for action, home modifications, occupational therapy, older people, place integration, practical rationalities, service organisation

LIST OF PUBLICATIONS

This thesis is based on the following papers, which will be referred to in the text by their Roman numerals:

- I. Johansson, K., Lilja, M., Petersson, I. and Borell, L. (2007) Performance of activities of daily living in a sample of applicants for home modification services, *Scandinavian Journal of Occupational Therapy*, 14, 1, 44-53.
- II. Johansson, K., Borell, L. and Lilja, M. Older persons' navigation through the service system towards home modification resources, *submitted*
- III. Johansson, K., Lilja, M. and Josephsson, S. (2008) Creating possibilities for action in the presence of environmental barriers, in the process of ageing in place, *Ageing and Society*. (in press)
- IV. Johansson, K., Josephsson, S. and Lilja, M. Practicing the good in allocation of home modification services, *submitted*

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PERSONAL INTRODUCTION

This thesis is the result of my first encounter with occupational therapy and occupational therapists. Before entering into the research project that was the basis for this thesis, and into the division of occupational therapy at the NVS department, Karolinska Institutet in April 2002, my knowledge and experience of occupational therapy theories and practice were very sparse. However, with an education in social anthropology, the theoretical focus on everyday life in occupational therapy research felt very comfortable to me. It also appeared that with my many years of experience in the Swedish home help service working as an aide with older persons, the research project focusing on the situation of older people in their homes was related to an area where I had a lot of involvement and empirical knowledge. Nonetheless the occupational therapy environment presented me with some challenges as a social anthropologist, and also as someone with a clear standpoint in a socialist and feminist ideology. In my view, those three perspectives are all focusing on how power relations on a structural level are experienced and acted upon in people's everyday life, which is my main area of interest in both research and politics.

In this thesis, no anthropological theories or research methods were used. However, an "anthropological thinking process" has guided the design, analysis and final interpretation of the included studies. The theoretical ambition of social anthropology is to understand how cultural and social ideologies and practices forge different people's everyday life and how they experience and act upon it. Within social anthropology ethnographic methods for data collection are mainly used. Ethnographic methods are based on a holistic and inclusive stance when it comes to studying people's everyday lives, allowing for inclusion of different aspects revealing themselves to be relevant to the studied issue. Theories and methods used in occupational therapy research in general focus on human experiences and actions in context. However, to my knowledge the integration of the ideological contexts into people's everyday life has rarely been in focus. I do believe that my anthropological interest in the integration of cultural and social ideologies and practices in people's everyday life is associated with a theoretical perspective different from occupational therapy perspectives. This may account for many questions that have been raised by an occupational therapy audience when I have presented the studies in my thesis.

The concepts of activity and independence are very central within theories and practice of occupational therapy. However, to my knowledge the cultural and normative dynamics behind those concepts have rarely been addressed. To me the connotations of the concepts with production and individualism were very apparent. Productivity and individualism are two central concepts in the ideology of neoliberal capitalism, which has had a strong impact on the political system in Sweden and many other countries in recent decades.

During my years in an occupational therapy environment I became familiar with an ongoing discussion about definitions and meanings of the concepts of activity and independence. This discussion has led to a conceptualisation of activity that is distanced from the comprehension of being active or productive. The discussion has also led to a conceptualisation of independence more in accordance with the conceptualisation used by the disability movement – that independence is an expression of autonomy and self-governance rather than an expression of individual independence. Despite those reconceptualisations of activity and independence I argue that the connotations of production and individualism are implicitly apparent. The words are used in policy documents, clinical practice, in disability movement material, in media and by lay people, often without an explicit definition. This means that the understandings of those words can be assumed to glide between various meanings and have implicit associations with productivity and individualism.

Being involved in a research project focusing on home modifications for older adults gave me an opportunity to go deeper into the concepts of activity and independence. Even though the understanding of those concepts was not the focus of the thesis those issues were inevitably touched upon, as the explicit aim of home modifications in Sweden is to facilitate activity performance and independence for persons with functional limitations. Through the research process I have carried the association of those concepts with neoliberal capitalism, even though nuanced by insights into the occupational therapy discussions about those concepts.

In conclusion, the reader should bear in mind that this thesis, intended for a PhD in occupational therapy, is influenced by an anthropological perspective. It is written by a person with an outsider's perspective, but nonetheless an insider's experience, on theories and concepts that are central in occupational therapy practice and research.

BACKGROUND

Introduction

The focus of this thesis is on the encounter between older persons who experience activity limitations in their home environments and the service organisation related to home modification services. Today the numbers of older persons living in their own homes are increasing in many countries in the Western world (Gitlin, 2003; Iwarsson et al., 2007; Rowles et al., 2003). In 2007 94% of the Swedish population aged 65 or older lived in their homes. Among the population aged 80 or older 84 % lived in their own homes (The national board of health and welfare, 2008). Older people often have to face barriers to activity performance in their physical home environments, and home modification services are provided by society with the ambition of reducing such barriers. In this thesis home modification services are defined as individually designed modifications of permanent features of the indoor or immediate outdoor home environment (Ministry of Health and Social Affairs, 1992).

Understanding older people's encounters with the service organisation for home modification services includes understanding interactions between older persons and their home environments as well as understanding the service organisation they meet. Theories and concepts from various academic fields are included in this thesis with the ambition of capturing the interactions between those various aspects. Home modifications are environmental interventions aiming to support activity performance in the home (Duncan, 1998; Gitlin, 1998; Heywood et al., 2002; Ministry of Health and Social Affairs, 1992). Occupational therapy, environmental gerontology and sociology of disability are research areas that focus on the interactions between activity, person and environment. Therefore research and theories from those areas are included in this thesis. To understand and discuss the situation of older people experiencing activity limitations in their homes, theories and research from critical gerontology were included. In order to research older people's encounters with a service organisation, there is a need to understand this service organisation (Griffiths, 2003; Richards, 2000). Theories and research from organisational theory are included in this thesis to facilitate this understanding. Sociology of health care and health geography are research areas that have a multidisciplinary approach to health experiences and service provision. Theories and

research from those two research areas can connect knowledge and perspectives from the other academic disciplines used in this thesis to understand older people's encounters with a service process.

Research on older people in the home environment and service provision to this group tends to ignore the ongoing character of older people's lives (Cutchin, 2003). The focus is often on definitions of problems and solutions directed at specific goals, as if those were static. However, in everyday reality problems, solutions and goals change with ongoing life (Cutchin, 2003). Changes in ongoing life might be of a long-term character, such as changes in physical functions, changes of physical features, relocation and relocation or death of friends and close kin. Changes might also be of a day-to-day character, such as variations in health conditions, weather, mood or in the ongoing life itself (Golant, 2003; Rubinstein and de Medeiros, 2003; Vik, 2008). Older persons can be agents who direct those changes, for example through their efforts to solve problems that occur in their ongoing lives (Richards, 2000; Rubinstein and de Medeiros, 2003). Other changes may be initiated beyond the older person's influence, such as changes in social or economic policies or demographic changes in neighbourhoods (Scheidt and Norris-Baker, 2003). However, all these changes interact with and influence each other in the context of an older person's ongoing life. Services such as home modifications are to be provided in this ever-changing ongoing life.

Recognition of the ongoing character of older people's lives has implications for service provision to this group. With this approach, problems, solutions and goals have to be continuously redefined. A service organisation that fails to recognise the changing character of the ongoing life might result in the provision of services that do not solve the older person's experienced problems, and in wasted efforts and resources for the service-providing organisations (Heywood, 2004b). Service organisations that recognise older people as agents and enhance their own efforts and problem-solving have been identified as tools of empowerment (Richards, 2000). When older people's efforts at problem solving are not recognised in the service process, the result might be confusion, frustration and disempowering experiences for the older person (Heywood, 2004b; Richards, 2000). This means that in order to provide services that efficiently meet older people's experienced needs and support their efforts at problem solving, there is a need to recognise the ever-changing

character of older people's lives, and to recognise them as agents in their ongoing lives.

In this thesis the focus is on home modifications services, provided in the ongoing lives of persons who experience physical barriers to activity performance in their home environments. Home modifications are provided in increasing numbers and at increasing costs in Sweden. The number of provided home modification grants has increased from about 10,000 in 1980 to 67,200 in 2006. During this period the costs for home modification grants have increased from 150 to 897 million SEK (adjusted rates) (The National Board of Housing Building and Planning, 2007). It has been suggested that home modifications have the potential to increase independence, self esteem and self-confidence by facilitating activity performance (Gitlin, 1998; Wyld, 1998). Positive effects of home modifications have been shown on activity performance (Fänge and Iwarsson, 2005a; Fänge and Iwarsson, 2005b; Petersson et al., 2008; Stark, 2004), rate of functional decline (Mann et al., 1999) and burden of care (Connell et al., 1993; Gitlin et al., 2001a). However, little is known about the dynamics underlying those findings. Furthermore, it is not known if the documented effects are related to older people's experienced needs. There is a lack of knowledge about how to design home modification services to meet older people's needs and preferences (Gitlin, 2003; Heywood, 2004b), and to support their own efforts at problem solving in their ongoing lives (Richards, 2000).

Home modification services are organised differently in different countries, but share the characteristic of involving many different actors in the service organisation (Arman and Lindahl, 2005; Pynoos et al., 1998). This means that older people's encounters with the service organisation related to home modification services involves interactions with a number of professionals and organisations. The encounter is also influenced by policy and practice related to service provision, and by interactions between different organisations and individual professionals involved in the home modification service process. To understand older people's encounters with the service organisation relating to home modification services, there is a need to focus on the interactions involved in the service organisation, and how they interact with older people's ever-changing lives.

To summarize, an older person's encounter with the service organisation for home modification services is comprised of the interactions between an ever-changing ongoing life and a service organisation involving a variety of organisational

and individual actors. The dynamics of those interactions are not well understood. Therefore the ambition of this thesis was to contribute theoretical and empirical knowledge about those dynamics that can potentially be used as a basis for design and provision of home modification services that meet older persons' needs.

A transactional perspective

As described above, to provide knowledge on which services can be based that can appropriately meet older persons needs and be empowering, there is a need to understand the interactions between older people's ever-changing lives and a service organisation involving different actors. A need to understand how different aspects and actors change with each other has been addressed in various research areas that focus on human action or occupation in context (Fischer, 2003; Griffiths, 2003; Law et al., 1996; Rubinstein and de Medeiros, 2003). There is agreement on the conclusion that present theories and research tend to ignore the changing characters of issues involving human action and occupation. It has been argued that theories and methods that do not recognise this changing character fail both in providing theoretical understandings of human action and society, and in evaluating and designing social policies and service provision (Cutchin, 1999; Dickie et al., 2006; Fischer, 2003; Griffiths, 2003; Law et al., 1996; Rubinstein and de Medeiros, 2003). In line with this argument, there is a need to focus on the connections between involved actors and aspects, to understand the changing characters of issues involving human action and occupation. The focus on such connections can be defined as a focus on the driving forces and relationships involved in changes of aspects relevant to the issue in focus.

In occupational therapy, occupational science and environmental gerontology the focus on connections between person and environment over time has been conceptualised as a transactional perspective (Dickie et al., 2006; Law et al., 1996; Rubinstein and de Medeiros, 2003). With a transactional perspective the focus is on connections between different aspects of the person and the environment, and on how involved aspects change with each other. The person and the environment are not seen as separate entities, but as an integrated whole.

In the research fields of organisational theory (Fischer, 2003; Grape et al., 2006) and sociology of health care (Allen and Pilnick, 2005; Davies, 2003; Fischer, 2003; Griffiths, 2003) the term "process perspective" is used to address an approach that focuses on connections between aspects and actors involved in the organisation of

service provision. With a process perspective the focus is on the connections between macro-aspects, such as policy and practice on the level of the nation or the organisation and micro-aspects, such as the face-to-face interaction between service users and individual professionals (Allen and Pilnick, 2005; Fischer, 2003; Griffiths, 2003). Organisations and actors are not seen as separate entities, but as interacting features that change with each other (Bergmark et al., 2000; Davies, 2003; Griffiths, 2003).

To understand interactions between older people's ever-changing lives and a service organisation involving different actors we need to focus on the connections between aspects and actors involved, and the changes resulting from those connections. The process perspective and the transactional perspective both address the driving forces and relationships that connect aspects and actors in ever-changing processes involving human action and occupation. Throughout this thesis the term transactional perspective is used to address this perspective, with the ambition of meeting the need to focus on connections between aspects and actors involved in older people's home modification processes.

Ageing with functional limitations

The title roles in this thesis are held by older people who experience activity limitations in their homes as a consequence of functional limitations. The ability to undertake activities of daily living is important for persons ageing in their home environment (Jagger et al., 2001). When designing interventions aiming to facilitate ageing in place it is crucial to understand underlying problems in activities of daily living experienced by older persons in their homes. It has been documented that functional limitations increase as ages increase and that those functional limitations are often associated with activity limitations (Kennedy and Minkler, 1998). Therefore this chapter provides a review of literature addressing ageing with functional limitations.

Most individuals experience functional limitations in their lifetimes. The issue is when and what functional limitations will appear, rather than if this will happen (Kennedy and Minkler, 1998; Verbrugge and Jette, 1994). The prevalence of functional limitations in western countries can be assumed to increase in all age groups as a consequence of advancements in medical treatment, rehabilitation and public health and the demographic change towards an ageing population (Putnam, 2002; Verbrugge and Jette, 1994).

The prevalence of functional limitations increases with age, but there has been an effort in gerontology to distinguish functional limitations from ageing, stressing that covariance is not equivalence (Kennedy and Minkler, 1998). The ambition has been to de-emphasise negative associations with old age, such as frailty and decreasing health, pointing out that negative consequences of functional limitations can be reduced or prevented by health promotion; this has also been termed successful ageing. The positive effect of this perspective is that frailty and decreasing health are not seen as unavoidable consequences of ageing. It has also been recognised that this focus on successful ageing includes a risk for further stigmatization of older persons with disabilities, who have not managed to prevent frailty and bad health (Angus and Reeve, 2006; Minkler, 1996; Putnam, 2002).

The risk of stigma can be discussed in relation to the social model of disability, which states that a persons' experiences of disability is primarily a consequence of an oppressive environment that fails to adjust to and include people with impairments (Barnes, 1999). With this perspective disability is not a characteristic of the person who has failed to prevent negative consequences of their impairments. The aim has been to eliminate stigmatization of people with disabilities.

Research and policy relating to disability issues has mainly addressed people with functional limitations at working age. The fact that the majority of people living with functional limitations are older calls for a broadening of research and policy of disability issues to include this group (Minkler, 1996). It also seems relevant to apply the social model of disability to research on older people, if the ambition is to prevent disability and eliminate stigmatization of older people with disabilities.

Research and policy relating to ageing has often excluded people who have lived with functional limitations since early ages (Putnam, 2002). Following from advancements in medical treatment and increased life expectancy, there is a growing group of people that come into older age with functional limitations, resulting from life-threatening chronic diseases, severe congenital and developmental conditions and severe injuries. This calls for a broadening of research and policy of ageing issues to include people who are ageing with functional limitations (Putnam, 2002). Research has indicated that persons coming into older ages with functional limitations experience high rates of medical and functional problems 20 to 25 years earlier than people with late onset functional limitations. They report three to four times the number of secondary health problems compared to their age-matched peers without

functional limitations. While people who experience onset of functional limitations late in life encounter medical, functional and psychosocial issues at the age of 70-75, people who experience functional limitations since early age can experience such encounters at the age of 55, or after having lived 20 years with functional limitations (Campbell et al. 1998).

It is not known if ageing is experienced differently between people coming into older age with functional limitations and people who experience functional limitations late in life. Furthermore, it is not known if those groups need different services. People who have lived with functional limitation since they were young often have experiences of disability services (Verbrugge and Jette, 1994). Such services are often framed in a terminology of autonomy and democracy, addressing rights and choice as a basis for service provision. In contrast, welfare services for older persons are often framed in the terminology of care and address needs and frailty as a basis for service provision (Angus and Reeve, 2006; Kennedy and Minkler, 1998; Putnam, 2002).

To summarize, people ageing with functional limitations constitute a heterogeneous group with respect to medical history and experiences of health and social care services. It is difficult to define the group to include research on older people with functional limitations. In this thesis people aged 40 or older were included. The choice was to include both persons ageing with functional limitations and persons ageing into functional limitations. Activity limitations are common in this group and it is a challenge for society to provide services to support performance of activities of daily living for persons ageing with functional limitations. Home modifications can potentially support performance of daily activities for this group by providing an environment that can adjust to, and include people with functional limitations. With this perspective older people's experiences of activity limitations are seen as a failure of society to provide an environment that adjusts to and includes older people with functional limitations.

The home as the place for ageing

This thesis focuses on the situation of older people living in their own homes. This is a situation shared by increasing amounts of people in Sweden, Europe and North America (Gitlin, 2003; Iwarsson et al., 2007; Rowles et al., 2003; The national board of health and welfare, 2008). Research on older persons and housing in North

American and in European contexts has shown that with older age, more time is spent in the home. It has also been shown that older people have developed an attachment to the home over a long period of time (Rowles et al., 2003). This means that the home has an important role in older people's ongoing lives.

Research from the Netherlands (Baht and Misra, 1999), Germany (Rowles et al., 2003), and Sweden (Hillerås et al., 1999) has shown that with increasing age, people spend more time in the home environment, and the spatial range where activities are performed tends to become more restricted. The reason behind could be a preference for a restricted spatial range of activities (Rubinstein and de Medeiros, 2003). A Swedish study of persons aged 80 or older show that the home was perceived as the origin of participation even when persons participated in activities outside the home (Haak, 2006). This indicates that the home should not be understood as an enclosed setting, but as an area of contact with the community.

The reason for older people's spending more time in the home and performing activities in a restricted spatial range might also be that health problems or barriers in the environment restrict their possibilities to perform activities in a wider spatial range (Larsson Lund and Nygård, 2004; Regeringskansliet, 2007). In those situations provision of home modifications can potentially increase the spatial range of activity performance by removing physical barriers for activity performance.

Research from Sweden and the USA has shown that the majority of older persons want to remain in their homes while ageing (AARP, 2000; The National Board of Health and Welfare, 2007; Äldrecentrum, 2001). This can in part be explained by the positive values associated with the home in the Western world. In spite of the knowledge that the home is the arena where abuse such as violence, neglect and destructive relations take place, the home is seen as a place of safety, comfort and close relationships, applying the perception of "home as haven" (Mallet, 2004). Research on older people has shown that the home is perceived as a place for freedom of action, spontaneity and habits. Moving to some kind of sheltered housing or assisted living has been shown to be associated with fear of losing those possibilities and values (Haak et al., 2007; Rioux, 2005). A Swedish study has shown that the limit of when it is perceived as not possible to remain in the home was continuously postponed by persons aged 80-89 (Haak et al., 2007). Therefore services such as home modifications that aim to facilitate for older persons to remain in their home have a potential to support older people's efforts to live in accordance with their own preferences.

It has been recognised that many older people remain in their homes even when they perceive that the limit of its possibility is passed, because they have no possibilities to move to any kind of assisted living. This situation might result from various reasons, including economical constraints, lack of assisted living facilities or practical or emotional barriers to such a big change in life situation (Regeringskansliet, 2007). Reducing physical barriers for activity performance and participation in the home environment might be particularly important to this group involuntarily living in their own homes.

To many older people their home is a place where they are rooted (Rioux, 2005), or where they are “in place” (Rowles, 2000), meaning that they have developed a strong attachment and associated values through a long-time process of habituation and development of meaning of home. The idea of place attachment has often been interpreted to explain why older people continue to live with physical barriers in the home (Heywood et al., 2002; Rowles, 2000). It has been documented that the home environment can constitute serious threats to health and restrictions of possibilities for activity performance.

Housing conditions with, for example, lack of proper heating systems or sanitary problems can make the home a source of health problems related to infectious diseases. Characteristics of the physical environment such as stairs, electric cords and narrow spaces are often the causes of fall accidents (Cumming et al., 2001; Gitlin, 1998). Deprived neighbourhoods and destructive family relations might restrict activity performance and reduce older persons’ control over their life situations (Gitlin, 1998). However older people’s attachment to their homes should not be understood as a lack of awareness of those negative conditions, but as attachment to other values of their homes. They have therefore developed strategies over time to handle barriers for activity performance (Heywood et al., 2002; Rowles, 2000). This means that removal of such barriers by home modifications has a potential to support older persons remaining in their home in accordance with their values.

Together, older people’s attachment to their homes and the fact that increased time is spent in the home give the home increasing importance in older ages. This means that interventions in the home environment intervene with a large part of an older person’s life, with respect to time, and with highly valued aspects of the home environment. Such interventions have a potential to support participation and activity performance in everyday life, but there is also a risk that they are experienced as intruding on values and preferences relating to activity performance and the home

(Gitlin, 1998; Heywood, 2005; Janlöv et al., 2005; Steward, 2000). When services are provided in the home, older people face their home and everyday life becoming an arena for consultation and decisions by different professionals (Andrews, 2002; Heywood, 2005; Tamm, 1999). It is therefore of great importance to understand the individual values associated with activity performance and participation in the home environment when designing and providing home modification interventions.

Research on the home environment for older persons has to a large extent focused on either the physical environment or on the “meaning of home”. Only a few studies have focused on the home as a context for activity performance (Haak, 2007, Larson Lund, 2004). Some studies have paid attention to the connections between the physical home environment and meaning of home (Heywood, 2005; Rowles et al., 2003). However those perspectives tend to regard both the meaning of home and physical features of the home as static, as opposed to a process of constant change (Cutchin, 2003).

There is a need of further knowledge on how occupations, values and physical characteristics related to the home environment connect and interact with each other. It is not known what strategies older persons use to integrate changes in the physical home environment, for example after a home modification, with their occupations and the personal values in their everyday lives (Steward, 2000).

Transactions of person and environment

The situation for an older person living with functional limitations in the home environment involves interactions between the person, the environment and the ongoing occupational life. The importance of the environment for human occupation and ageing is central in environmental gerontology (Lawton and Nahemov, 1973; Wahl et al., 2003) and occupational therapy (CAOT, 2002; Diehl and Willis, 2003; Kielhofner, 2008) as well as in disability research (Barnes et al., 1999). All those theories agree that a person’s possibilities to perform activities in accordance with their preferences and values is to a large extent determined by the environment, including physical, social and political aspects.

Theories of person environment fit developed from Lawton’s model of environmental press are often used in environmental gerontology (Wahl et al., 2003). The model of environmental fit suggests that environmental barriers constitute barriers for performance of activities at a higher degree for persons with low levels of

competence (Lawton and Nahemov, 1973). Here, competence means personal characteristics such as physical and psychological functioning and values that determine people's capacities to adapt to environmental press (Lawton and Nahemov, 1973). The model of environmental press has been empirically supported in research (Fänge and Iwarsson, 2003; Iwarsson, 2005; Stark, 2004). Even though Lawton's model focuses on the interactions between different aspects of the person and the environment, it has been criticised for excluding the dynamics of such interactions (Law et al., 1996; Wahl et al., 2003). The terminology of competence has been criticised for ascribing functional, psychological and cognitive characteristics as internal to the person (Scheidt and Norris-Baker, 2003), ignoring people's everyday experiences of the person-environment interaction, and the creativity and actions used to handle such experiences (Rubinstein and de Medeiros, 2003). This could be seen and discussed in relation to the social model of disability, which considers activity limitations or disabilities to be the consequence of an environment that fails to adjust to persons with a variety of characters and impairments (Barnes et al., 1999).

Different theories of persons and environments emphasise different aspects of the person and the environment. They all include physical, social and cultural aspects of the environment, and physical, social and psychological aspects of the persons (Kielhofner, 2008; Law et al., 1996; Lawton and Nahemov, 1973; Rubinstein and de Medeiros, 2003). However, those theories can be criticised for creating never-ending lists of important aspects, without managing to capture the connections and interdependence between those aspects (Cutchin, 2004; Law et al., 1996; Rubinstein and de Medeiros, 2003). This limitation has frequently been acknowledged by environmental theorists (Law et al., 1996).

In the disciplines of environmental gerontology and occupational therapy the need for an transactional perspective has been addressed (Golant, 2003; Kielhofner, 2008; Law et al., 1996; Rubinstein and de Medeiros, 2003; Scheidt and Norris-Baker, 2003). A transactional perspective demands a change of the conceptualisation of the research unit from different variables or phenomena to the arena where variables and phenomena are integrated. This arena has been conceptualised as events (Law et al., 1996), occupational settings (Kielhofner, 2008) or situations (Cutchin, 1999; Cutchin, 2007). In spite of the recognised need of a transactional perspective, there is a lack of theories and methods that manage to capture the transactional perspective of person and environment. The concept of place integration was developed in dialogue with the need for a transactional perspective by Cutchin (1999, 2003) as a philosophical and

conceptual tool adding important dimensions to the theoretical and empirical understanding of the dynamics of people in context. The concept is based on the geographical understanding of place and the philosophy of pragmatism.

In contemporary cultural geography, place is understood as a continuously changing integrated socio-cultural and physical experienced setting that cannot be separated into parts (Cutchin, 2004; Wiles, 2005). Pragmatism focuses on the ever-changing and integrated character of human experiences and action. The objects of inquiry are the time-specific contexts in which experiences and actions occur, which have been conceptualised by John Dewey, the classical philosopher of pragmatism, as unique situations that can never be repeated (Cutchin, 1999; Cutchin, 2007). In line with those concepts, the place integration process is understood as a process of continuous transactions into new situations. Changes in the person-place whole lead to a disintegration of the person-place, and an undetermined situation from which problems and possibilities emerge and stimulate creative thoughts and actions in order to reintegrate the person-place entity (Cutchin, 1999; Cutchin, 2003). The place integration process can be described as a spiral of transactions into new situations rather than as a linear process in which causes and consequences follow a unidirectional chronology or a circular process of repeated and predictable situations. Older people's ongoing lives related to the home environment can be understood as a spiral of place integration (Cutchin, 2003; Johansson et al., 2008). In line with this reasoning, older people's encounters with the service organisation related to home modifications can be understood as a process of place integration.

Modifications of the physical home environment

Research in the Swedish and North American contexts has shown that older people often face barriers to activity performance in their physical home environments, such as placement of sinks and bath tubs, heavy doors and lack of handrails (Gitlin et al., 2006; Gitlin et al., 2001b; Iwarsson, 2005; Lilja and Borell, 1997). Even when older persons are living in modern houses with adequate space, as is mainly the case in Sweden, barriers are experienced in the physical home environment. For instance, in the city of Stockholm 75 percent of the older population have no access to an elevator in their housing and therefore have to be capable of managing stairs in order to get into and out of their dwellings (Lilja, 2000; Äldrecentrum, 2001). Environmental barriers are also common even in houses built

as recently as the late 80s (Iwarsson and Isacson, 1993). Research on older people's home environments has documented that physical barriers are mainly experienced in situations relating to bathing and self-care, movement indoors and getting in and out of the home building (Gitlin, 1998).

Modifications of the home environment are often recommended by occupational therapists to facilitate performance of meaningful activities, and in a longer time perspective, to make it possible for older persons with functional limitations to remain in their homes (CAOT, 2002; Gitlin, 1998). It has been shown that older people modify their home environments by themselves as an early step in handling barriers to activity performance (Gitlin, 1998). Modifications of the physical home environment can include very different interventions such as rearrangement of existing furniture and home equipment, for example rugs and electrical cords, provision of assistive devices, or modifications of more permanent features such as installation of lifts and reconstruction of bathrooms (Cumming et al., 2001; Johansson et al., 2007; Stark, 2004).

Research on home modification interventions uses different terminology and different definitions of home modifications, based on both research interest and the organisation of services in the local setting where the research was conducted. In this thesis the definition of environmental modifications is restricted to modifications of permanent physical features in the indoor or immediate outdoor environment of the home, as is included in the Swedish law of home modification grants (Ministry of Health and Social Affairs, 1992). However, in the following literature review a broader definition of home modifications is used, including rearrangement of existing furniture and home equipment and provision of assistive devices. This choice was made to include existing research on effects of home modifications.

Existing research on effects of home modifications indicates that modifying the home environment can enhance accessibility and usability of the environment (Fänge and Iwarsson, 2005a; Fänge and Iwarsson, 2005b), increase satisfaction with activity performance (Stark, 2004), increase safety and reduce difficulties in activity performance (Petersson et al., 2008) and restore dignity and decrease feelings of insecurity (Heywood, 2004b). It has been demonstrated that home modifications can slow down the rate of functional decline and reduce the cost for health care services (Mann et al., 1999). Other studies indicate that home modifications can reduce the burden of care for caregivers of persons with mobility impairments (Connell et al.,

1993) and for persons with dementia (Gitlin et al., 2001a). Preventive effects of home modifications on fall accidents were indicated in a randomised controlled trial (Cumming et al., 1999). A study of stroke clients showed that a great majority of users of assistive technology, including home modifications, perceived increased positive impacts of those assistive technologies 12 months after a stroke (Gosman-Hedström et al., 2002).

Effects of home modifications must be understood in the context of older persons' ongoing lives. It is difficult, or maybe impossible, to conduct controlled studies that include the complexity of interactions between all involved aspects (Gitlin, 2003). The interaction between the home environment and activity performance in an older person's ongoing life involves factors like health conditions, mood, weather, health care and rehabilitation services. Documented effects of home modification services can be assumed to reflect not only the home modification intervention but also changes in those other aspects (Fänge and Iwarsson, 2005a; Fänge and Iwarsson, 2005b; Gitlin, 2003; Heywood, 2004a; Stark, 2004).

Documented effects of home modifications are also dependent on the sociocultural context, including the service system, where studies are conducted (Fänge and Iwarsson, 2005a; Gitlin, 2003; Heywood, 2005; Petersson et al., 2008; Stark, 2004). It has been argued that when services are provided in the home environment the assessment process becomes part of the intervention (Richards, 2000) and that research on home modifications needs to include the service process relating to the intervention (Fänge and Iwarsson, 2005a; Gitlin, 2003; Heywood, 2005).

To summarise, the body of research focusing on the home environment and home modifications shows that there are numerous barriers to activity performance in the home, and that home modifications can have a potential to facilitate activity performance in the home environment. More knowledge is needed about the dynamics underlying such findings to better understand needs and effects of home modifications. Little is known about how needs of home modifications are perceived by older people, and in what life situations such needs appear. We do not know if the documented effects are measures related to older persons' experienced needs. Furthermore, there is a need of further knowledge about how home modifications interact with older people's other strategies of problem solving related to barriers in the physical home environment, and how this influences effects of home

modifications. Characters and effects of home modifications depend largely on the socio-cultural and organisational contexts in which they are provided, but the complexity of the interaction between people and the home environment is a shared feature. Therefore this thesis can provide theoretical knowledge about the interactions relevant to various socio-cultural and organisational contexts.

The policy of ageing in place

The home modification applicants participating in the studies included in this thesis share the situation of ageing with functional limitations in the home environment with an increasing amount of older people in Sweden and other countries. This can be explained through a combination of ideology, social policy, economics and demographics as well as older people's own preferences. Most older persons want to remain in their homes even if their functional abilities, safety and independence are threatened (AARP, 2000; The National Board of Health and Welfare, 2007; Äldrecentrum, 2001) which has been discussed in the chapter on the home as the place for ageing with functional limitations.

The positive values associated with home in the Western world can be assumed to have influenced the general trend to deinstitutionalise long-term care in Sweden and other countries during the second half of the 20th century (Bergmark et al., 2000). The disability movement representing various consumer groups has strongly promoted that persons with functional limitations have the right to live in their own homes, as an expression of their right to participate in the community on the same conditions as others (Independent Living Institute, 2006). In accordance with the ideology of home as the best place to be, the guiding principle for organisation of health care services and housing policies in Sweden and many other countries has been to promote possibilities for older people with functional limitations to remain in their homes (Clemens et al., 1994; Cutchin, 2003; Means et al., 2003; Ministry of Health and social affairs, 2001). Policy and practice related to this principle has been termed "ageing in place".

The ideology and related policy of ageing in place has been criticised, stating that when the home environment is too problematic to handle, people suffer from remaining in their homes (Regeringskansliet, 2007; Thorslund et al., 1997). In Sweden housing policies of ageing in place have led to a shortage of nursing homes or sheltered housing (Regeringskansliet, 2007). The consequence of this is that many

older persons in need of extensive care and services are living in their own homes. In addition the number of persons receiving rehabilitation services in their homes increases because inpatient treatment time has shortened during recent decades (Carlsson et al., 2002; Gitlin et al., 2001b; Lilja et al., 2003; Tamm, 1999).

There are also economic incitements for a policy of ageing in place. In an effort to decrease costs, eligibility criteria for long-term care and assisted living facilities have increased in Sweden (Bergmark et al., 2000), resulting in that many older people with extensive care needs live in their homes (Regeringskansliet, 2007). The demographic fact that the amount of older people is increasing in Sweden and other countries (SCB, 2005; US Census Bureau, 2007) has led policy-makers and researchers to conclude that in the future there will not be enough resources in terms of economy and potential employees to provide institutional care for the increasing amount of older people (Robertson, 1997). This conclusion can be assumed to have contributed to the promotion of ageing in place.

To summarize, the consequences of an ageing population and the policy to meet this challenge is debated. However, we can expect increasing numbers of older persons who live in their own homes and need services from the society to manage activity performance in everyday life. We can also expect policies of ageing in place to dominate future politics of housing for older people, even though the content and meaning of ageing in place might change.

The organisation of home modification services

The service organisation related to home modification services involves many organisations and professional actors (Arman and Lindahl, 2005; Pynoos and Overton, 2003). Besides the older person experiencing activity limitations in the home, and his/her close kin, the service organisation might involve different health and social care professionals, administrative staff, landlords and craftsmen. This means that the older person experiencing a need for home modifications has to navigate through those organisations and individuals to get their needs of home modifications met in an appropriate way. Difficulties for clients to find the right resources through the service system have been documented in the context of rehabilitation (Larsson Lund and Tamm, 2001; Lilja et al., 2003a; Wressle et al., 2002), and social care (Billings and Leichsenring, 2005). However there is limited research illuminating how persons in need of services from the society in general, and

older people in need of services related to their home environment in particular, try to orient themselves on resources that can solve their experienced problems.

The individual normally experiences the meeting with individual professionals as the arena where decisions about services provided are made (Lipsky, 1980). However the final decisions taken in this meeting are the results of decisions taken on many different organisational levels, including the national political level, local management (Allen et al., 2004a; Cott, 2004; Hughes and Griffiths, 1997; Lilja et al., 2003a). In addition the service process related to the same individual often involves different organisations working in adjacent areas. For example, decisions related to ageing persons' ongoing everyday lives might involve organisations working with home modifications, assistive devices, home help, health care, rehabilitation and economic support.

To understand and evaluate health and social care services both on an organisational level and on the level of individual service users, there is a need to understand how involved organisations and individual actors interact (Allen and Pilnick, 2005; Griffiths, 2003). Macro aspects of service organisation have mainly been addressed in the discipline of organisational sociology, focusing on organisations as actors. Micro aspects, focusing on actions and experiences of organisational employees and service user, have been addressed in the field of sociology of health and social care. The meeting between professional actors and service users has also been addressed in client-centred occupational therapy, with a focus on the communication between clients and therapists. Within those fields it has been recognised that to understand service provision, there is a need to connect macro and micro levels of the service organisation (Fischer, 2003; Grape et al., 2006; Griffiths, 2003; Townsend and Wilcock, 2004).

It has been recognised that the complexity of the organisation of health and social care services increases when services are provided in the community compared to services provided in institutional settings (Davies, 2003; Griffiths, 2003). This means that resource allocation and health care management cannot be understood through studies of institutions as physically limited. Understanding of home modifications and other services provided to a person in the home environment calls for studies of socio-cultural relationships that connect different organisational levels and actors (Davies, 2003). Those relationships also involve policies and ideologies underlying policy and practice of health care provision. (Fischer, 2003; Grape et al., 2006; Griffiths, 2003).

Theories of neoinstitutionalism focus on the socio-cultural relationships connecting different organisational levels and actors involved in the organisation of services (Fischer, 2003; Grape et al., 2006). The concept of organisational fields has been presented as a tool to understand such relationships. This concept is used through this thesis, as defined by DiMaggio and Powell (1983):

“those organisations that, in the aggregate, constitute a recognised area of institutional life: key suppliers, resource and product consumers, regulatory agencies and other organizations that produce similar service or products.” (p.148)

There is an increasing body of research connecting organisational features of health care services with experiences and actions of employees and service users (Allen et al., 2004b; Allen and Pilnick, 2005; Weiner et al., 2003). However there is still a need for a better understanding of the growing complexity of health care organisation. To my knowledge, there is no research that focuses on the connections between interactions in the service organisation and experiences and actions of service users in the context of service provision to older people in the home environment. In short, there is a need of further research on the dynamics of the service organisation related to home modifications for older people, including policy and practice on different organisational levels.

Translation of occupational problems into eligible needs for home modifications

It can be assumed that older persons seeking home modification services do not experience a need for a home modification, but rather experience an occupational problem in their ongoing everyday lives, related to physical barriers in the home environment. However, in order to receive home modification services, this occupational problem has to be translated into eligible needs for such services. According to professional guidelines for occupational therapists their task is to enable clients to define needs and solutions (CAOT, 2002; Carlsson et al., 2002; FSA, 2005; OT Australia, 2005). Similar ideas are reflected in policies of health and social care service, including rehabilitation. Those policies advocate respect of persons' autonomy (Proot et al., 1998) and services meeting needs defined by the person in need of services (CAOT, 2002; Carlsson et al., 2002; FSA, 2005; OT Australia, 2005; The national board of health and welfare, 2001). However, definition of needs appears to be a difficult issue, involving conflicting definitions (Bergmark et al., 2000; Parry-Jones and Soulsby, 2001).

To get approval on an application for home modification grants demands that professionals involved in the service organisation assess the applicants' situations to qualify for eligibility for home modifications (see study context p.27). Literature on meetings between professional actors and clients show how the outcomes from such meetings depend on how the client is categorised (Johansson, 1992; Lipsky, 1980; Prottas, 1979). In recent years it has been recognised that categorisation in assessment situations is not static, but is rather a process of negotiation of needs and solutions between clients and individual professional actors and between different professional actors (Griffiths, 2001; Olaison and Cedersund, 2006; Vassy, 2001). Several recent studies have focused on such negotiation processes in the context of assessment of Swedish older persons' needs for home help (Dunér and Nordström, 2005; Hellström Muhli, 2003; Janlöv et al., 2005; Nordström, 1998; Olaison and Cedersund, 2006). These studies show how categorisations are negotiated through talk and how individual professionals balance restrictions and resources given by the organisational framework, professional identity and clients' needs in those negotiations. Providing knowledge about the face-to-face interaction between clients and professional actors in the home environment, those studies dismiss the spectra of organisational levels influencing those interactions. Furthermore, present research has not addressed how the outcomes of those interactions interact with older persons' ongoing everyday lives, or with their other efforts to solve problems.

Implementation of services based on a holistic perspective, autonomy and self-defined needs demands that the organisation of services allows for needs and solutions that do not fit into a standardized set (Law et al., 1995; Wilkins et al., 2001). Various research shows that older people experience that they have to adjust their definitions of needs to existing services (Janlöv, 2006; Lilja et al., 2003b). These findings indicate that the service organisation is incapable of designing and providing services and interventions based on service-users' own definitions of needs.

The terms "self-determinism" and "choice" are often used as positive terms associated with autonomy and self-defined needs. However, it has been shown that self-determinism and choice in health and social care services often mean that autonomous choices are to be made from a menu of services (Agich, 1995; Proot et al., 1998). This can be labelled consumerism (Gesler and Kearnes, 2002), and the consequence of this is that persons in need of services from the society have to be competent consumers. To be a competent consumer demands access to resources needed to make autonomous choices, such as knowledge of the service system and a

capacity to formulate self-determined needs and solutions. When services are financed with community resources choices of services must be formulated as rights (Agich, 1995) even when they are not associated with legal rights, as is the case for home modification services in Sweden. Eligibility for rights to resources is determined by how well a person's character and life situation fit into categories used by service-providing institutions and available services (Cott, 2004; Johansson, 1992; Robertson, 1997).

In short, translation of older persons' occupational needs into eligible needs for home modifications involves a process of negotiations with different professionals. The ambition of health and social care services, such as home modifications, is to provide services that meet the client's own defined needs from a holistic perspective. However, this demands that the service organisation allows for needs and solutions that do not fit into standardised sets. It also demands that clients' can express their occupational problems in terms of needs and rights.

Agency empowerment

Recognising older people as agents in the service process and enhancing their own efforts and problem-solving has been identified as a tool of empowerment (Richards 2000). Consequently home modification services that enhance older people's efforts to solve experienced occupational problems in the home have a potential of being empowering.

The ambition of this thesis is to apply a transactional perspective of older people's encounters with the service organisation related to home modification services. This reasoning has implications for how to understand agency in the context of older people's ongoing lives in their home environments. Traditionally agency is understood as the autonomous individual's power to act on a situation through thoughts, language and action (Christiansen and Townsend, 2004; Wray, 2004). However, in line with a transactional perspective, agency can be understood as one aspect involved in the active relationship that connects the individual and context over time. This leads to a need of conceptualising agency as creative and generative and autonomy as relational, as has been suggested by Wray (2004).

The emphasis on autonomy and self-determinism in the society in general and specifically in relation to health and social care services can be understood to be

based on a liberal-individualistic perspective of autonomy. There is a growing body of research showing that an individualistic concept of autonomy and related consumerism is not conducive to understanding agency and autonomy in a broader cultural context, and in a broader spectrum of life situations (Cardol et al., 2002; Eales and Keating, 2001; McCullough and Wilson, 1995; Proot et al., 1998; Wray, 2004).

It has been suggested that autonomy should be conceptualised as a relational ongoing process in the practice of everyday life, and agency should be conceptualised as creative and generative (Agish, 1995; Wray, 2004). This reasoning has implications for how to design a service process that is empowering by recognising older people as agents in their ongoing lives (Richards, 2000). To enhance autonomy as an ongoing process in everyday life, persons must be provided with means to exercise their everyday choices in accordance with their values and preferences, rather than with means to maximise self-determination and decision-making opportunities (Eales and Keating, 2001).

Given this re-conceptualization of agency and autonomy, there is an emergent need to improve knowledge of the dynamics of older people's preferences, needs and efforts at problem-solving in their ongoing everyday lives, as a basis for the design of empowering services.

Summary

To conclude, the literature review shows that to understand the encounter between older persons' ongoing everyday lives and a service process involving a variety of organisational and individual actors, there is a need to increase the understanding of driving forces and relationships that connect different aspects and actors involved in this encounter. The literature review also shows that there is and will also be in the future a growing group of older people living with functional limitations in their home environments. There is a need to increase the understanding of ageing in the home environment, or ageing in place, to provide theoretical and empirical knowledge on which service design and provision to this group can be based.

The literature review shows that it is well known that barriers for activity performance are common in older people's physical home environments. However it is not well known how those barriers are experienced or in what situation a need of

home modifications is experienced. Little is known about what constitutes a need for home modifications or how this need is defined. We do not know what problems older people expect to have solved by home modifications or what changes they expect and experience from an installed home modification. Furthermore little is known about how home modifications interact with older people's other strategies to handle a situation where they experience activity limitations.

In recent years researchers in the fields of environmental gerontology and occupational therapy have addressed a need of theories and methods for understanding the complexity of ageing in context in general (Golant, 2003; Rubinstein and de Medeiros, 2003) and specifically the complexity of ageing and activity performance in the home environment (Gitlin, 2003; Iwarsson et al., 2007). The concept of place integration (Cutchin, 1999; 2003) has been suggested as a tool with which to meet this need, and also as a potential tool to understand how this complexity connects to the service process.

Researchers in the field of older people in the home environment conclude that to understand effects of interventions in the home environment we need to understand the service process as part of the intervention. In the wider field of research on provision of health and social care services it has been concluded that to understand outcomes of service provision on both individual and societal levels, there is a need to connect the macro-level of organisational features with the micro-levels of experiences and actions of professional actors and service-users.

RESEARCH AIMS

The overall aim of the thesis was to provide theoretical and empirical knowledge of the interactions involved in the encounter between persons who are ageing with functional limitations in their home environments and the service organisation related to home modification services in the context of one Swedish municipality. The following research questions were developed to meet the aim of the thesis and the four included studies were designed to answer those research questions.

- How are activities of daily living managed in an ongoing life, by persons who have identified a need for home modifications? (Studies I & III)
- What constitutes a need for home modifications and how is this defined? (Studies I, III & IV)
- What actions are taken to handle a situation in which a need of home modifications has been identified, and what are the driving forces that direct those actions? (Studies II, III & IV)
- How do policies and organisational features of home modification services influence allocation of resources to older persons? (Study IV)
- How is the service process experienced and handled by persons who have applied for HM services? (Study II)

Specific aims of the four studies included in the thesis

Study I. The aim of this study was to examine the relationship of difficulty and independence in performance of activities of daily living, use of assistive devices, housing and living situations, to the home modification applied for in a sample of applicants for home modification grants in Sweden. In addition, the aim was to examine differences in applied home modification, independence and difficulty in activities of daily living, between subgroups in the sample having different kinds of social support

Study II. The aim of this study was to explore and describe how older adults in one Swedish municipality tried to find their way and navigate through the service system in order to receive home modification services that could meet their experienced needs.

Study III. The aim of this study was to explore the process of ageing in place, in relation to home modification services. More specifically, the study aimed to increase the understanding of the transaction in everyday life relating to service delivery among some older individuals who have had an application for home modification services approved.

Study IV. The aim of this study was to explore the dynamics of discourses and social practice in the institutional field of home modification services.

STUDY CONTEXT

The four studies included in this thesis were conducted in the context of home modification services to older people in one Swedish urban municipality. In Sweden home modification services are regulated by a law of home modification grants. The aim of this law is to “facilitate for persons with functional limitations to live an independent life in their homes” (Ministry of Health and Social Affairs, 1992). The law is formulated in general terms and gives room for different interpretations in individual cases, and different local professional practices. However it clearly states that grants should be provided for adaptation of permanent physical features in the indoor or immediate outdoor environment that are assessed to be necessary for individuals to perform activities of daily living, unless the modification can be classified as specifically aiming to improve the general standard of the home. The grant is provided irrespective of the financial situation of the applicant, and it is not dependent on whether the home is rented or owned or whether it is an apartment or house (Ministry of Health and Social Affairs, 1992). Application for home modification grants often involves health and social care professionals, i.e. occupational therapists in primary care at hospitals and rehabilitation clinics, or home care managers. An application must be signed by a member of the household where the modification is to be installed, but a referral from a health care professional is normally required. Needs are assessed by home modification officers at the municipal administration based on the application, the referral and sometimes a home visit (Arman and Lindahl, 2005). If the home is rented, the installation of the modification must be accepted by the landlord (Ministry of Health and Social Affairs, 1992). Once an application is accepted, the grant is provided to the client, who is supposed to order the installation of the home modification. However, in reality this is normally done by the home modification officers (Arman and Lindahl, 2005).

In the studied municipality officers at the home modification department were mainly occupational therapists, physiotherapists or engineers by education. It was formally stressed that the referral should certify a problem but not a solution. In reality the referral often certified a need of a specified modification. When an application was received the home modification officers normally contacted the applicant by telephone. If judged possible, assessment of needs and solutions was done over the phone, but otherwise home visits were conducted to make an

assessment. If an application was approved the home modification officers presented offers from contracting companies to the applicant, including the cost for the installation of the modification.

To apply and receive home modifications in the studied municipality includes a waiting time for the application to be handled, as well as a waiting time for an accepted home modification to be installed. The waiting time for installation of more extensive modifications, such as stair lifts or remodelling of bathroom was normally six months or more. Less extensive modifications, such as ramps and rails were normally installed a few weeks after an application had been approved. The waiting time for an application to be handled varied during the period of inclusion of participants between one to six months, depending on workload and organisation of work at the home modification department.

Annually, around 6000 home modifications applications were received at the department. Of those about 3500 were from persons aged over 40 who had applied for one or more of the home modifications in focus for the project.

METHODS

Different designs were chosen in the four studies included in this thesis to study older people's home modification process (see Table 1).

Study I was designed to describe the life situations of persons who had applied for home modification grants. A descriptive quantitative design was chosen. Some statistical analyses of relationships and differences between different variables and subgroups of the sample were also used.

Study II was designed to explore experiences of applying for and receiving home modifications grants, identified in group discussions included in a home modification research project (described later in the method section). A case study design was chosen, as is recommended when the research questions focus on real life events in which borders between the context and the phenomena under study are not clear (Yin 2003). Findings from the group discussions constituted the theoretical basis for choice of cases to be studied and the development of research questions (Yin, 2003).

Study III was designed as a longitudinal in-depth interview study with the ambition of obtaining a deeper understanding of the life situations of persons who had applied for home modifications using a transactional perspective. It was also designed to explore how this situation related to the process of service provision.

Findings from Studies II and III showed that the older person's ongoing life was interconnected with actions and events in the service process. Study IV was designed to explore the professional actor component in this interconnectedness. The method of critical discourse analysis developed by Fairclough (1995) was chosen with the ambition of integrating micro and macro aspects of the service process.

The thesis is part of a larger research project, the Home Modification Project (HMP), focusing on different aspects of home modification services for older adults. The project aims to increase the understanding of effects of home modifications services from the perspective of older service users, and to provide knowledge on which design of service provision can be based. It is conducted in one Swedish municipality. The service organisation in this municipality was described above, under the heading of "Study setting".

Table I. Designs of the four studies included in the thesis.

	Study I	Study II	Study III	Study IV
Design/research approach	Quantitative explorative	Multiple case explorative	Qualitative longitudinal	Critical discourse study
Participants	Home modification applicants n = 102	Home modification applicants n = 4	Home modification applicants n = 4	Occupational therapists in primary care n=14. Home modifications officers n=5
Methods of data collection	Structured instruments	Open ended interviews, field notes	Open ended interviews	Focus group discussions Official documents
Data analysis methods	Descriptive statistics	Interpretive content analysis	Theory driven, hermeneutic approach	Critical discourse analysis

Participants in Studies I, II and III in this thesis were recruited among persons participating in the HMP and some data used in Studies I and II were collected within the HMP. Therefore the procedures of inclusion of participants and data collection in the HMP are presented in the following method description.

The Ethics Research Committee at the Karolinska Institute approved the Home Modification Project, including the four studies in this thesis.

The Home Modification Project (HMP)

Sample selection

Between 2002 and 2004 participants were consecutively enrolled by professionals working at the home modification department (i.e. occupational therapists and physiotherapists).

The professionals were trained to screen potential participants using the inclusion criteria for the research project (see below). They made initial contact, informed the potential participants about the project, and asked for their consent to be contacted by the researchers. Written information about the research study was mailed to those who agreed to be contacted, and followed up by telephone contact in order to request informed consent. Final evaluation of whether inclusion criteria were met was made at the first data collection. A maximum of ten participants were consecutively included

each month, as this was the maximum number the research team could collect data on, with respect to time resources.

To be included participants had to be aged 40 or older, be able to speak Swedish, live in their own homes and have applied for, but not received, home modification grants. The inclusion criteria were restricted to applications related to any of the following problem areas: bathroom, differences in levels, movement indoors, and access to home building. The reason for this restriction was that the HMP targeted the most common problem areas related to home modification (Iwarsson and Isacson, 1993; Mann et al., 1999). Applications only comprising removal of thresholds, a common modification related to movement indoors, were not included because of the routines for handling those applications at the agency.

Exclusion criteria were health conditions that prevented participating in the interviews. Cognitive status was screened with the guidance of the Mini Mental State Examination (MMST) (Folstein et al., 1975) and depression was screened by CES-D Depression Scale (Radloff, 1977). Those with scores of 19 or under on the MMST or 23 or over on the CES-D were excluded from the study. Exclusion because of other health conditions was mainly based on potential participants' own evaluations.

During the period of inclusion 244 persons were identified as potential participants by the recruiters at the home modification department. At the final evaluation of whether exclusion and inclusion criteria were met, 107 persons were identified as not meeting the inclusion criteria. Reasons for exclusion included: home modification had already been installed (n=37), too sick to participate (n=37), cognitive problems (n=12), depression (n=6), no longer needed home modification or had moved (n=3), could not be reached (n=6), or other reasons (n=6).

After the remaining 137 persons had received further information about the study, 23 persons did not want to participate. In all 114 agreed to participate in the project. There were no significant differences in age and gender between the 114 participants and those who did not want to participate (n=23). With a few exceptions the participants lived in rented apartments, owned apartments or owned houses, with rented apartments being the most common. This reflected housing conditions in the studied urban municipality.

A wide variety of self-reported health problems were represented in the sample and many participants reported more than one health problem. Among the 102 participants in study I 83 reported neuromusculoskeletal problems and 82 reported respiratory problems. Other frequent health problems among the participants were

related to the digestive functions (n=67), sensory function and pain (n=65), as well as cognitive/mental problems (n=34). A total of 27% (n= 28) of the participants rated their overall health as good or very good, 51% (n=52) as fairly good and 22% (n=22) as poor.

Data collection

Data in the HMP were collected by either researchers (including the author) or research assistants. Interviews, field notes, group discussions and files from the home modification department on applied home modification were used to collect data.

Interviews were performed in the participants' homes before the home modifications were installed, then two and six months later. The quality of the data collection by the interviewers was monitored and reviewed closely by: a) providing training sessions, b) having written standardised rules for completion of the interviews, c) ongoing supervision of interviewers and, d) monthly coordination meetings. A battery of structured assessments was used, including three assessments used in this thesis. These included:

1) The Older American Resources and Services instrument (OARS) (Fillenbaum, 1988). OARS is a questionnaire designed to provide descriptive data on demographics, and on individual's resources and capabilities in five general areas of well-being (social and economic resources, mental and physical health and ability to perform activities of daily living). The instrument was slightly modified to reflect different resources in the Swedish society (for example education, income, social services). Information about earlier home modifications, technical aids, and time in present housing was added to give data related to home modification.

2) The Functional Independence Measure (FIM) (UDSMR, 1993) was used to collect data on the level of functional independence in activities of daily living. The FIM consists of 18 items in two separate domains – the physical/motor domain and the social and cognitive domain (Linacre et al., 1994). As physical barriers were the focus of the study, the 13 items in the physical/motor domain were used. Psychometric properties of FIM have been tested and supported by numerous researchers (Hamilton et al., 1994; Kidd et al., 1995; Ottenbacher et al., 1996). Functional independence is reported on a

7-point rating scale, where 7 is complete independence; 6 is modified dependence, use of assistive device, 5 is supervision or set-up (no physical contact), 4 is minimum assistance, 3 is moderate assistance, 2 is maximum assistance, and 1 is total assistance. According to the manual, (UDSMR, 1993) FIM scores should primarily be based on observations by health care professionals, but the instrument is also developed for an interview approach. In this project FIM was used as a structured interview.

3) Part I of the Client-Clinician Assessment Protocol (C-CAP) (Gitlin and Corcoran, 2000; Petersson et al., 2007) was used to collect data concerning perceived level of independence, difficulty and safety in activities of daily living. The psychometric properties of a Swedish version of C-CAP Part I have been investigated in Sweden, using the Rasch rating-scale model (Bond and Fox, 2001). The findings provided support for the difficulty scale's internal scale validity, person response validity, and person separation. Furthermore, the results showed that the instrument could be applied to ageing people with disabilities in the home environment (Petersson et al., 2007). The C-CAP Part I consists of 18 tasks, i.e. personal activities of daily living (PADL), instrumental activities of daily living (IADL), mobility and leisure. The instrument was used according to the manual. The C-CAP Part I is conducted as a structured interview. For each of the 18 tasks clients are asked how they perceive their difficulty on a five-point scale (5=no difficulty, 4= a little difficulty, 3= difficult, 2= a lot of difficulty, 1= unable to do at all). The scale is presented to the clients in both oral and written form, to enable the clients to identify which category represents their perceived difficulties. The chosen score is then documented by the interviewer on the C-CAP instrument paper chart (Petersson et al., 2007).

Field notes including information about the participants' current life situations and events in the home modification service process were taken at each data collection session. Field notes also included information on activity performance based on both the participants' descriptions and observations made by the interviewer.

Group discussions

Group discussions were carried out with nine persons included in the HMP. The group discussions focused on experiences of the home modification service process. The participants met the inclusion criteria of having finished participation in data collection for the HMP. In addition they met the inclusion criteria of having received home modifications, having shown interest in sharing their experiences of applying for and receiving home modifications, and being in a physical and psychological condition that made it possible for them to participate in group interviews. Among 19 persons invited to participate, 11 persons declined, referring to mobility problems or lack of energy, but also to reluctance to speak in groups. The group discussions were moderated by the author and a co-worker, guiding the discussions towards issues related to experiences of the home modification service process. The interviews were audiotaped and transcribed verbatim. The material was analysed using content analysis, in order to identify and summarize informative content (Patton, 2002; Sandelowski, 2000). The analysis demonstrated that the participants' experiences of the home modification service process related to their expectations of different actors involved in the service process, including themselves, rather than to the installed modification.

Data collection and analysis specific for the four studies included in the thesis.

Study I

Participants in Study I were 102 persons included in the HMP by June 2004. The data used was collected at the first session of data collection. It included: a) data on demographics, housing, earlier modifications, time in present housing and use of formal support collected with the OARS questionnaire, b) data on performance of activities of daily living collected with FIM and with the difficulty scale from C-CAP Part 1, c) data about participants' health situations, assistive devices, and living situations collected with selected questions from the medical condition history and social resource scale parts of the OARS. Data from the files at the home modification agency on applied home modification were also included in the study.

Descriptive statistics (Altman, 1999) were used to analyze performance of activities of daily living, demographics, use of assistive devices and applied home modification. Chi square tests were used when examining relations between different

home modifications applied for and housing situation, living situation and use of assistive devices.

For analysis of relationships between activity performance and social support, participants were sorted into four groups based on use of formal support and living situation. Formal support was defined as receiving social support, such as home help or personal assistance. The Kruskal-Wallis test was used when examining differences between the four groups in rank order of independence and difficulties in activities of daily living.

A p-value of 0.05 or less was considered to be of statistical significance (Altman, 1999). All statistics were computed using Statistical Package for the Social Sciences (SPSS) version 9 software (Statistical Package for the Social Sciences).

Study II

Four persons who had participated in the group discussions in the HMP were specifically invited to be included in a case study. These four persons were invited because they were identified as representing different expectations of actors involved in the service process, and different experiences of the service process.

Open-ended interviews (Patton, 2002) were conducted with each of the four participants in their homes about 18 months after they had received their home modifications. Questions were asked about what institutions or individuals the participants had turned to when trying to get needs of home modifications acknowledged, and what services that they had received. Questions were also asked about the participants' expectations and experiences through the service process. Additional phone interviews were done to clarify findings in preliminary analysis. For all participants the service process was still ongoing in some way and the interviews covered both retrospective descriptions and their immediate experiences of the situation. All interviews were audiotaped and transcribed verbatim. Field notes collected in the HMP were also used as data.

The data analysis was done by the author and two co-workers. All data from interviews and field notes was organised by case to get an overall understanding of how the process of trying to get access to appropriate resources to solve their problems was conducted and experienced by the four participants. A cross-case analysis (Yin, 2003) was performed to explore the different expectations and experiences that were the basis for selection of the included participants, and how this related to how they tried to get access to appropriate resources. Differences and

similarities between the participants were compared and then further interpreted to identify patterns that could provide more in-depth knowledge about the relationship between expectations, experiences and actions taken (Yin, 2003). In the analysis an interpretive content analysis was applied (Sandelowski, 2000; Thorne et al., 1997). The analysis revealed that the relationship between the participants' expectations, experiences and actions taken through the service system could be seen as directed by maps. Therefore "the geographical map" was used as a metaphor to explain this relationship. A geographical map is constructed by the symbolisation of what is chosen as meaningful for understanding and navigating through the geographical landscape (Cutchin, 2007). In this study, maps of the home modification organisational landscape used by the participants were constructed by symbolisations of what was identified by the individuals as meaningful for understanding and navigating through the organisational landscape. The maps included descriptions of what institution was responsible for providing what services and what was required to be eligible for such services.

Study III

Four participants were purposefully selected (Patton, 2002) from participants included in the HMP by May 2004, to include different onsets of functional limitations and a variation in changes in activity performance expected from the applied home modification. The four included participants met the inclusion criteria of living in rented apartments, having shown an interest in sharing their experiences related to home modification services at the first occasion of data collection in the HMP, and having had their application of home modification grants approved by the home modification agency. Once a total of four participants was reached, it was concluded that data was rich enough to explore the issues on which the study was focused.

Data was collected with open interviews (Patton, 2002) in the participants' home environments on subsequent occasions during a period lasting from before the modification had been installed until there was judged to be some stability in the situation relating to the home modification service process. The periods varied from eight to seventeen months. On the occasions of data collection in the HMP at two and six months after inclusion, data for this study was collected with an open interview with the four included participants when the structured interview was ended. In addition, the four participants were contacted by telephone at intervals

of one or two months. If they described a change related to home modification services or activity performance, time for an open interview was booked. Altogether 16 interviews were conducted, with a minimum of three with each participant. Each interview lasted between one and two hours and all interviews were conducted by the author.

An unstructured interview guide was used to allow the interviews to unfold in accordance with individual participants' processes. The interview guide covered the following areas: a) how the participants managed everyday life and what problems they experienced, b) expected or experienced changes in the everyday life situation related to the applied or installed modifications, and c) actions taken to handle the situations and experiences of those actions. The interviews were audiotaped and transcribed verbatim. In addition the participants were asked to demonstrate how activities relating to the applied or installed home modification were performed, which provided a situation where questions about immediate experiences and actions could be asked. For practical reasons no tape recorder was used in those situations. Notes about the participants' experiences and actions were written immediately after the demonstrations.

The data analysis was based on a hermeneutic approach, meaning that dialectics between experience-near and experience-distant perspectives were interpreted, aiming to achieve a theoretical understanding of the participants' everyday experiences and actions (Geertz, 1983; Gustavsson, 2000). The analysis involved all three authors of the article.

First all data was read to get an overall understanding of the material. In an early phase of analysis the concept of place integration (Cutchin, 2003) was identified as a useful tool for analysing the connections between the participants' experiences and problem-solving in everyday life and the home modification service process. In line with this concept sections of the texts including descriptions of what constituted problematic situations, motives for and choices of action and the new situation resulting from this action were identified. The identified sections served as data for further analysis and were organised to describe a spiral of place integration for each individual. The four individual spirals were compared and analysed with the intent of answering the following questions: What constitutes the problematic situation, and how is this problem defined? What motivates the choice of action to be used to reintegrate the person-place? What constitutes the new situation in relation to choices of actions taken?

Further interpretation showed that the answers to those questions related to four overlapping and interacting phases associated with concepts in the place integration process according to Cutchin (2003), and with the organisation of services. Those phases were understood as ongoing courses of events. The identified courses of events were: a) an undetermined situation constituted by problems in activity performance relating to barriers in the home environment, b) creative thoughts and actions resulting in an application for home modification services as an action to solve the problematic situation, c) actions taken to handle everyday activity performance while waiting for home modifications and d) a new situation that was handled with or without home modifications. The material was reorganised based on those courses of events to describe a spiral of place integration that was valid for all four participants. With the ambition of reaching a theoretical understanding of the transaction in everyday life relating to home modification services this spiral was interpreted to explore the meaning of the identified courses of events, and the transactions between them.

Study IV.

Two sources of data were used in this study – focus group discussions with professionals and documents related to legacy and policy of home modification services. Home modification officers at the home modification department and occupational therapists in primary care were concluded to be of central importance for resource allocation of home modification services to individuals with functional limitations ageing in their home environments. Therefore those two professional categories were included.

Documents were chosen to represent institutional discourses that were explicitly or implicitly related to home modification services. Thus policy documents relating to Swedish legislation and policy on home modifications and disability and the occupational therapy profession were selected (see Table II).

A focus group method was chosen to encourage participants to express, discuss and reflect on their perspectives (Krueger, 1994). Focus group discussions were conducted separately with home modification officers and occupational therapists in primary care. Each focus group had four to five participants to achieve rich discussions and allow all participants to talk (Krueger, 1994). The group discussions were conducted during working hours, and were restricted to about two hours each, to make

participation possible with respect to workload and employers' consent. The discussions were audiotaped and transcribed verbatim.

Table II. Included documents

Document	Source	Character of document
The Home Modification legislation	Ministry of Health and Social Affairs (1992)	Law text
Guidelines for the Home Modification Grants	The National Board of Housing, Building and Planning (2000)	Instructions for implementations of the law
From patient to citizen- a national policy for disability politics	The Swedish Government (Regeringskansliet) (2000)	Government bill
Code of Ethics for occupational therapists	Swedish association of occupational therapists (FSA) (2005)	Ethical guidelines for professional occupational therapists

Table I lists document included in the study, the source of the documents and the characters of the documents

One focus group that was conducted with home modification officers took place at the home modification department. A contact person at the department was informed about the study and asked to compose a group consisting of about five home modification officers employed at the department. The discussion was moderated by the author, asking open-ended questions (Patton, 2002) that addressed the interaction between different actors involved in the home modification service process. Follow-up questions directed the discussions towards descriptions and reflections of how the participants acted in the service process.

Three focus group discussions were conducted with occupational therapists working in primary care. Participants were recruited from one geographical district through an occupational therapist employed there, who was also a Masters student. Nineteen occupational therapists from nine different primary care centres were individually invited to participate, and fourteen accepted. Three focus groups were conducted, organised so that no participants were from the same workplace. The discussions took place in a meeting room at one primary care centre, and were moderated by the author and the Masters student. Open-ended questions were asked about how the participants reasoned and acted when working with home modifications for older persons. The participants were asked to relate their answers to

real cases. Follow-up questions were asked, addressing the interaction between different professional actors involved in the home modification service process.

The analysis was performed in line with Fairclough's (1995) conceptualisation of three dimensions of discourse, including text, discourse practice and socio-cultural practice. The three authors of this study were all involved in the analysis through detailed discussions of data interpretation. First a descriptive analysis of all texts was conducted, identifying four macro-level discourses. Those discourses were understood to represent existing hegemonic discourses in fields related to welfare policies and practice in Sweden. The four identified discourses were: 1) Economic discourse: Using social resources efficiently, 2) Occupational therapy professional discourse: Client-centred assessment of needs, 3) Bureaucratic discourse: Following rules and regulations and 4) Discourse of human rights and democracy: Guarantee of individual human rights and democracy.

Hegemonic discourse is defined as the discourse that dominates a field through continuous struggles of hegemony between different discourses (Fairclough, 1995; Fischer, 2003). An organisational field can include different discursive fields, and is therefore an arena for interaction between different hegemonic discourses. According to Fairclough (1995) such macro dimensions of discourse practice constitute part of the context of any discursive event, and are necessary for its interpretation. Therefore the identified hegemonic discourses were used as tools for the analysis.

In the final analytic steps a hermeneutic approach was used, meaning that dialectics between data-near and theoretical perspectives were interpreted in an attempt to achieve an understanding of the dynamics between discourse practices, social practices and professional practices in the organisational field of home modification services (Geertz, 1983; Gustavsson, 2000).

The macro dimensions of discourse practice were analysed by examining how identified hegemonic discourses were interpreted and communicated in the texts included in the study. Discourse practices were found to be consistent between the three focus groups with occupational therapists in primary care. In the following, data from those focus groups were analysed as one text. Next, non-discursive aspects were identified, meaning the socio-cultural practice in immediate situations and the wider organisation (Fairclough, 1995), i.e. circumstances that constituted the conditions for professional practice. Local discourses were ascertained to be produced in the specific contexts of the two institutional settings included in the study.

The dynamics in this discourse production were further analysed. The final concluding step analysed how the identified local discourses were expressed in the participants' descriptions of their professional practice. The analysis showed that the participants acted the local discourses in their professional practice. This was interpreted as acted judgements, which connects with Cheryl Mattingly's (1998) work on occupational therapists' professional practice. Mattingly describes occupational therapists' professional practice as their answers to the question 'What is good here?'. This conceptualisation was recognised as useful for interpretation of data in this study, and therefore the acted discourses found were identified as "the good".

Integration of findings from the four included studies

Findings from all studies were finally integrated and interpreted to reach a deeper understanding of interactions involved in the encounters between persons who are ageing with functional limitations in their home environments and the service organisation related to home modification services.

The concept of place integration and the concept of practical rationalities were identified to address the driving forces and relationships that connect different aspects involved in the older persons' encounter with the service organisation related to home modification services. These two concepts were used as theoretical tools to integrate and interpret findings from all four studies included in this thesis, with the ambition to meet the aim of the thesis.

In Study III the concept of place integration (Cutchin, 1999, 2003) was used as a tool for analysing the connections between the participants' experiences and problem-solving in everyday life and the home modification service process. In addition the concept of place integration was identified as a useful tool to integrate findings from all studies that could contribute to the understanding of connections between the participants' experiences and problem-solving in everyday life and the home modification service process.

In Study IV, the findings were discussed in terms of the concept of practical rationalities (Mattingly, 1998). In line with Mattingly's conceptualisation of practical rationalities the professional practices of the included professional groups were interpreted as their answers to the question "what is the good here?" Those answers, i.e. practical rationalities, were developed through the relationships between moral judgements and practice (Mattingly, 1998). The concept of practical rationalities was

identified as useful for understanding strategies used by both professionals and the older persons in the interactions between the ongoing lives of persons who are ageing with functional limitations in their home environments and the service organisation related to home modification services.

Findings in the previously conducted studies were reread with the concepts of place integration and practical rationalities as a basis for inquiry. Findings related to those concepts were identified and further interpreted. A hermeneutic approach (Gustavsson, 2000) was used in the final analysis to integrate findings from all studies. In this analysis the dialectic relationship between findings from all studies and the theoretical perspectives related to the concept of place integration and practical rationalities were interpreted with the ambition to achieve an understanding of the encounters between persons who are ageing with functional limitations in their home environments and the service organisation related to home modification services from a transactional perspective.

Place integration

Two questions were developed based on the concept of place integration (Cutchin, 1999, 2003) and guided the analysis of findings from all studies. The first question was: “What constitutes a problematic situation in the presence of physical barriers for activity performance in the home environment?” Findings from Study III were identified to provide some in-depth answers to this question, while findings from Study I were identified to describe some aspects of this problematic situation on a group level. Through the analysis the problematic situation in the presence of physical barriers for activity performance in the home environment was identified as being constituted of threatened possibilities for actions. This finding guided the development of the second question into: “How do creative thoughts and actions emerge from a problematic situation constituted by threatened possibilities for action, and what are the strategies resulting from those thoughts and actions?” Findings from Studies II and III were determined to provide some answers to those questions from the perspective of the older persons. Findings from Study IV were determined to provide some answers to the same question from the perspective of the professional actors involved. Findings identified as providing answers to the two questions developed from the place integration concept were further interpreted with the ambition of gaining a deeper understanding of connections between the participants’

experiences and problem-solving in everyday life and the home modification service process.

Practical rationalities

In line with the concept of practical rationalities, findings from all studies that could contribute to the understanding of the relationships between moral judgements and practice were identified. Identified findings included findings from Studies II, III and IV. The relationships between moral judgements and practice were further analysed with the ambition of explaining and understanding the development of and interaction between different practical rationalities involved in older people's home modification processes.

FINDINGS

An interpretation of all of the four studies included in this thesis showed that the older persons' aspirations to regain or increase possibilities for action was a constant driving force in the encounter between their ongoing lives and the service organisation related to home modifications. In line with the place integration concept the older persons' creative thoughts and actions were demonstrated to be directed towards creating situations with possibilities to perform activities in accordance with their values and preferences. Through the analysis those situations were conceptualised as possibilities for action. This concept was developed with the ambition to highlight the fact that the older persons' aspiration was not directed towards performance of specific activities, but towards situations where they had possibilities to perform various activities in accordance with their values and preferences.

The findings showed that older persons' strategies and experiences related to the home modification process were influenced by events in the service organisation and by outcomes of processes of negotiations of practical rationalities with different professionals.

Studies II and III showed that the older people's home modification processes were ongoing for a long period of time. Data collection for Study II was conducted about 18 months after home modifications were installed in the participants' homes. However, the encounter with the service organisation related to home modifications was still ongoing for all four participants. Similarly, data collection for Study III continued until there was judged to be some stability in the situation related to the home modification service process. This period lasted up to 17 months after the first interview. Findings showed that from the perspective of the older person the home modification process included changing situations both with respect to activity performance and their encounter with the service organisation.

Findings from Study IV showed that from the perspective of the included professionals, the main driving force in their encounter with older people's ongoing lives was an aspiration to achieve allocation of home modification resources in accordance with the good. The analysis showed that the included professional groups tried to implement their answers to the question "what is good here?" in their professional practice.

Threatened possibilities for action

Answers to the question of what constitutes a problematic situation in the presence of physical barriers for activity performance in the home environment were provided in Studies I and III. The problematic situation was found to be constituted by difficult, unsafe and complicated activity performance, resulting from the older persons' strategies to create or regain possibilities for action. A consequence of those experiences was that the participants were, or thought they soon would be dependent on help to perform activities in their homes. Adjusting activity performance to schedules and preferences of formal or informal helpers was experienced as restricting possibilities to execute spontaneous choices about when and how to perform an activity. This was identified as threatened possibilities for action.

Findings from Study I showed that the included home modification applicants performed activities related to the applied home modification independent of assistance from another person, but with considerable difficulties. This was confirmed and further explained in Study III, which showed that the participants used creativity and physical efforts to perform activities on their own, at the cost of great difficulty, insecurity and loss of spontaneity.

Study I also showed that the participants used assistive devices to a great extent in activities related to the applied home modification, indicating that assistive devices have an important role in older persons' efforts to maintain or regain possibilities for action. However the participants experienced a situation where use of assistive devices included difficulties in activity performance.

Data on activity performance showed high levels of functional independence in general among the participants, but also a variation in independence between different groups. In Study I functional independence and difficulty were compared between four subgroups of participants, based on use of formal support and living situations. The comparison showed no homogenous picture of at what stage of independence a problematic situation leading to an application for home modifications is experienced. No differences were found between groups in reported difficulties in activities relating to the applied home modification. Those findings were interpreted to show that threatened possibilities for action were experienced at a certain level of difficulties but at different levels of functional independence.

In short, the analysis showed that a problematic situation in the presence of physical barriers for activity performance in the home environment was constituted by threatened possibilities for action. A need of home modification was interpreted to

occur in situations where strategies to preserve or regain possibilities for actions in the presence of barriers in physical home environment included a large amount of difficulties and unsafe and complicated activity performance. Those difficulties and the unsafe and complicated activity performance were experienced as threats to possibilities for action, as the participants perceived that they might result in activity performance that was not in accordance with their preferences and values.

Struggling to regain possibilities for action

One question that guided the analysis addressed creative thoughts and actions that emerge from a problematic situation constituted by threatened possibilities for action, and the strategies resulting from those thoughts and actions. Answers to this question from the perspective of the older persons were provided in Studies II and III. The findings showed that the participants' creative thoughts and actions were focused on regaining possibilities for action. The strategies resulting from those thoughts and actions were focused on changes in activity performance and towards gaining access to home modification services. Strategies focused on activity performance included physical effort and planning. Strategies focused on gaining access to home modification services included construction and use of maps of the service organisation. The participants' efforts to develop and use those strategies were identified as struggling to regain possibilities for action.

The analysis showed that the aspiration to create possibilities for action was a driving force guiding the participants in development and use of strategies to perform activities on their own. Development and use of such strategies were found to be accomplished with great efforts that continued in the participants' ongoing lives during the home modification process. This struggle resulted in new problematic situations, including difficult, unsafe and complicated activity performance. The strategies to create possibilities for action also involved the participants' struggles to overcome their own resistance to performing activities with physical effort and difficulty.

When the participants in Study III accepted help, it was done in such a way that their possibilities for action were preserved as much as possible. This demanded planning and organisation that hindered spontaneity. To have a possibility to do spontaneous activities outside the home was perceived as possibilities for action by some participants. Two participants who could not get in and out of their homes on their own had both developed strategies to coordinate spontaneous activities with scheduled health care activities outside the home, for which transport services were

already organised. One participant ordered the return trip from health care activities so that there was time to “*roll around for a while*”. The findings also show examples of how the participants struggled *not* to receive help that was experienced as intruding on possibilities for action.

Findings from Study II added some understandings of how creative thoughts and actions resulted in strategies to gain access to appropriate home modification resources to support possibilities for action. The findings showed that the participants created maps, including descriptions of what institution was responsible for providing what services and what was required to be eligible for such services. The maps were based on the participants’ understanding of the service organisation and their own values. They used the maps to navigate through the service system towards home modification resources that could support their possibilities for action. The participants’ navigation by the map guided their choice of which professional actor to communicate with and how to present their situation. Different maps led the participants to communicate with different numbers of professionals, and also to communicate with professionals representing different institutions. Study II demonstrated that when there was a discrepancy between the older person and professionals in understanding of responsibilities and eligibility in the service system, the participants continued their navigation process, trying to convey their situation in another way or to another professional actor. In practice this could result in an extended waiting time for a home modification. The participants’ continuous navigation through the service system was interpreted as a struggle to gain access to home modification resources that could support their possibilities for action.

The findings demonstrated how the strategies to regain or create possibilities for action changed with the service process, including unpredictable actions and events. This was most obviously exemplified by one participant in Study III. She had applied for a home modification grant for a stairlift to make it possible to get in and out of her home, and remodelling of the bathroom so she could take showers without assistance. The landlord did not accept installation of the modifications. This led her to challenge her physical capacity and struggle to develop techniques to shower and get in and out of the house on her own. The strategy directed towards gaining access to home modifications was changed to a strategy directed towards activity performance, in a struggle to create possibilities for action.

Study II showed how unexpected responses from professionals in the service organisation changed the older persons’ navigation through the service system.

Congruence in understandings of responsibilities and eligibility in the service organisation between the older person and professionals in the service organisation resulted in expected responses from professionals to the older persons' strategies to gain access to home modification services. This was interpreted to demonstrate that the older persons acted on the situation through their strategies to create possibilities for action. In line with the conceptualisation of agency as the possibility to act on a situation through thoughts and actions (Christiansen and Townsend, 2004), experiences of expected responses were identified as agency. Ironically this agency could not direct the final design and installation of the home modification, but insufficient modifications were accepted when they resulted from a process in which the participants experienced their action of communication as agency

In short, strategies emerging from creative thoughts and actions in a situation where possibilities for action were experienced as threatened involved changes in activity performance as well as construction and use of maps of the service system. Applying for home modification services was shown to be one strategy involved in transactions with other strategies and driving forces in the encounter between older persons' ongoing lives and the service organisation related to home modifications. Development and use of strategies to regain possibilities for action involved a great deal of struggle for the older persons, and their aspirations to regain possibilities for actions was identified as a strong driving force in this struggle. It was also shown that actions and events in the service organisation, including unplanned events and unpredictable behaviour among involved actors, were driving forces guiding changes in the older persons' ongoing lives.

Developing practical rationalities

Through the analysis, the participants' creative thoughts and actions emerging from a problematic situation were identified as practical rationalities. Findings from Study IV showed that professional practices in the two included professional groups were guided by their answers to the question of how their perceptions of the good can be implemented in this situation, i.e. what is good here? Findings from Study II showed that the maps used by the older persons in their struggles to gain access to home modification services were to a large extent based on their values. Their choice of professional actor to communicate with and their way to present their situations were interpreted as their answers to the question of how they could act in accordance with their values to gain access to resources than could solve

their experienced problems, i.e. “what is good here?”. Similarly, the creativity shown in Study III in the participants’ efforts to generate situations with possibilities for action were interpreted as their answers to the question of how they could act in accordance with their values to create possibilities for action in the presence of environmental barriers. The strategies used to implement the answers to “what is good here?” were identified as practical rationalities (Mattingly, 1998). Findings from Studies II and III provided some understandings of how practical rationalities were developed among the included home modification applicants. Study IV explicitly focused on development of practical rationalities among home modification officers and occupational therapists in primary care.

Interpretation of findings from Studies II and III showed that the older persons’ different values and different perceptions of possible ways to act resulted in different practical rationalities. Findings from Study II exemplified four different values as bases for constructing and using maps of the service system. Those four values were: 1) respecting rights and duties, 2) individual experiences of hygienic standards, 3) trust in another person and 4) not causing the social welfare system too many expenses. The four participants in Studies III all shared the value that having the possibility to make spontaneous choices about when and how to perform an activity was important. Other values were more individual. For example, an important value for one participant was not to bother others. Other participants valued participating in social activities outside their homes.

The strategies used to imply what was perceived as the good were found to be guided by what actions were perceived as possible to execute. Study II showed how the perception of possible ways to act was guided by the participants’ understanding of the service system. Thus the older persons’ practical rationalities were the actions that could be read from their constructed maps. Study III showed how the perceptions of possible ways to act were guided by the physical environment, access to and quality of social support and the participants’ physical capacities. Possible ways to act were also restricted to actions that did not intrude on the participants’ values. In sum the strategies used to imply what was perceived as the good were determined by the participants’ experienced scopes of action.

Study IV showed how practical rationalities among home modification officers and occupational therapists in primary care were developed through a process of balancing the different hegemonic discourses identified as related to welfare policies and practice in Sweden. The findings demonstrated that the characters of the

professional situations constituted a platform from which those acts of balancing were performed. The professional situations were constituted of non-discursive aspects, meaning the practical framework of professional tasks, as well as by associated discourses.

The central characteristic of the professional situation of occupational therapists in primary care was identified as closeness to the client's reality. This reflected that their work was to a large extent constituted of home visits to clients, and the participants' interpretation of the discourse of client-centred assessment of needs. The findings showed that occupational therapists in primary care balanced a professional occupational therapy discourse with an economic discourse into the local discourse, which was "use of social resources to meet true needs in a cost-efficient way". This means that their practical rationality was the actions perceived as needed to use social resources to meet true needs. The main means in this practice was to separate demands from needs to save community resources

Adherence to rules and regulations was identified as the central characteristic of the professional situation for home modification officers, reflecting the fact that their work was to apply rules and regulations to individual cases. Their professional situations were also found to reflect their interpretations of the bureaucratic discourse. The findings show how home modification officers balanced a bureaucratic discourse with the discourse of human rights and democracy into the local discourse, which was "use of bureaucracy to guarantee justice and self-determinism". Their practical rationalities were the actions perceived as needed for using bureaucracy to guarantee justice and self-determinism. Findings showed that the home modification officers interpreted rules and regulations as constructed to guarantee self-determinism and legal security for clients, resulting in a perception of following rules and regulations as the main means of practicing the good.

The findings showed that practical rationalities were the actions perceived to be in accordance with central values, possible to perform and needed to create a situation that was in accordance with the participants' perceptions of the good. Those practical rationalities were interpreted as the participants' strategies to act their values, within an experienced scope of action. The findings show that practical rationalities were not absolute, but rather changed with the situation.

Negotiating threatened possibilities for action into technical solutions

The findings showed how the older persons' experiences of threatened possibilities of action were translated into technical solutions such as home modifications through negotiations of different practical rationalities. In this negotiating process the problematic situation first had to be defined in order to get an agreement about the problem to be translated. Secondly, an agreement was needed about the correct translation into a solution. Findings from Studies II and III show that the character of this negotiation differed between the individual older persons. Together with findings from Study IV those findings provided some understanding of driving forces and relationships involved in the negotiation of different practical rationalities.

Findings from Study II were interpreted to show that the four included older persons expected their practical rationalities to be shared by the professionals to whom their navigation through the service organisation led them. It appeared that the person who had based the map on respecting rights and duties, and the person who had based the map on trust in another person both experienced shared practical rationalities between themselves and professional actors. In contrast both the person who had based the maps on own experiences of hygienic standards and the person who had based the map on not causing the social welfare system too many expenses experienced discrepancy in practical rationalities between themselves and the professionals. Those who experienced discrepancies were dissatisfied with the service process, while the two others expressed satisfaction with the service process.

Study III showed how negotiations could be differently performed. One participant described how an occupational therapist from a rehabilitation clinic made a home visit and asked many questions about what activities the client used to perform, resulting in an agreement about technical solutions to his experienced problems. Another participant described how he had to confront a professionals' ideas about how he would not be able to manage stairs, or even remain at home, stating that *"They had to give up because I, I was the one who was going to make the decision"*. A third participant exemplified how negotiating with an involved professional could be fruitless. The discrepancies in perceptions of problems and solutions between this participant and her landlord turned out to be too large handle. Applying for home modifications appeared to be an action that could not solve her experienced problem, resulting in a change in practical rationality.

As the home modification applicants did, the included professional groups also expected other actors involved in the service process related to home modification services to share their practical rationality. Their efforts to practice the good included providing other actors with facts about components included in their balancing acts, expecting them to come to the same conclusions about how to implement the good. This was interpreted as acting for collaborative practice of the good.

The outcome of the negotiations of different practical rationalities influenced the older persons' strategies to regain possibilities for actions, their expectations of their actions, and their experiences of possibilities for action. For example, the participant in Study III whose negotiation with professionals resulted in agreement about definitions of needs and solutions expected the installation of the home modifications to help him regain his possibilities for action. He kept those expectations even though the installation of the modifications was repeatedly delayed. His expectations even increased, partly because he shared other people's positive experiences of using stairlifts and electric wheelchairs.

To summarize, the actors involved in negotiations of experienced threatened possibilities for action into technical solutions expected other involved actors to share their practical rationalities. A consequence of this was that they presented facts and aspects underlying their definitions of problems and solutions, expecting other actors to come to the same conclusion about problems and solutions, i.e. about what answers the question of what the good is here.

GENERAL DISCUSSION

The aim of this thesis was to provide enhanced empirical and theoretical knowledge of older people's encounters with the service organisation related to home modification services, applying a transactional perspective. The findings provided new knowledge about the driving forces and relationships involved in this encounter.

One general finding related to the older persons' perspective was that the older persons' aspirations to create possibilities for action was a strong driving force throughout the home modification process. An additional general finding was that the strategies used to create possibilities for action were expressions of practical rationalities resulting from relationships between the older persons' values and their experienced scope of action.

Findings from the studies included in this thesis also demonstrate how the relationship between older people's practical rationalities and different professionals' practical rationalities directed the home modification process through a process of negotiations. Practical rationalities were shown to be developed in the two included professional groups through relationships between different discourses and their professional situations.

Findings from the thesis have implications for how to understand older people's needs for home modifications. The findings also have implications for how efforts at problem-solving in their ongoing lives can be understood and supported. In addition, they have implications for how to understand and apply a client-centred approach. The findings also raise questions about how agency and empowerment can be understood, and how empowering services that support older people's agency can be designed. The following discussion will elaborate on these findings and older people's home modification processes.

An aspiration to create possibilities for action

Interpretation of findings from Studies I, II and IV showed that the older persons' actions and experiences were guided by their very strong aspiration to direct the situation related to activity performance in the home environment towards possibilities for action. A need of home modification occurred in situations where a threat to the individuals' possibilities for action was experienced. This threat included experiences of difficulty as well as unsafe and complicated activity performance resulting from the

use of strategies to perform activities in accordance with preferences and values when there were barriers in physical home environments. The findings demonstrated how the older persons struggled to develop and use strategies to create possibilities for action through the home modification process.

The home modification applicants included in study II and III were found to be involved in a home modifications process lasting for up to two years. During this period, the older persons' strategies following from their aspiration to create or regain possibilities for action were directed towards immediate as well as more distal situations. Applying for home modification services was shown to be one strategy used in combination with strategies to handle activity performance in immediate situations.

The older persons' strategies directed towards immediate situations included development of strategies to perform activities on their own, at the cost of difficulty, unsafe and complicated activity performance. Their motivation for this was that adjusting when and how to perform an activity to schedules and preferences of formal or informal helpers was experienced as restricting possibilities for action. Those findings provided further insight about the dynamics underlying results in previous research showing that home modifications have little effect on independence (Fänge and Iwarsson, 2005b; Petersson et al., 2008) but can reduce difficulty and increase safety (Heywood, 2004a; Petersson et al., 2008).

Similar findings from other studies in the Nordic context have shown how older people took action and struggled their utmost to be able to perform activities without support from another person as a means to be able to govern their daily lives, which was experienced as a basis for freedom and spontaneity (Dunér and Nordström, 2005; Haak et al., 2007; Vik, 2008). A theme in common for findings from the studies cited above and the findings from this thesis is older people's strong struggle to perform activities in accordance with their preferences and values. Another shared theme in those findings is that functional independence per se was not important to older persons, but was rather experienced as a prerequisite for performing activities in their everyday lives in accordance with their values and preferences. Findings from the studies included in this thesis contribute to a growing body of research showing that the use of functional independence as an indicator of successful interventions is not an appropriate measure of how interventions directed towards older people with functional limitations succeed to appropriately meet older people's needs (Agich 1995; Cardol, De Jong and Ward 2002; Wray 2004).

The concept of possibilities for action was developed and used in this thesis to highlight that the older persons' aspiration was not directed towards performance of specific activities, but towards situations with possibilities to perform activities in accordance with their values and preferences. Since rehabilitation and other interventions aiming to support older people with functional limitation in their home environments are often directed towards activity performance, the conceptualisation of possibilities for action calls for a change of focus into barriers for possibilities for action in policy and practice of services directed towards older people in their home environment.

Findings from Study I were interpreted to show that assistive devices had an important role in the older person's efforts to maintain or regain possibilities for action, but were not enough to reduce experienced difficulties. Other studies have shown that there is a hierarchy related to the use of assistive devices and assistance from other people (Gitlin, 1998; Pettersson et al., 2005). It has been shown that people tend to first try to manage activities of daily living with assistive devices and then in a second step ask for help from other people. Those findings are to some extent supported by findings in Studies I and III. However, the results from Study III show that this hierarchy seems to result from the older persons' creativity and efforts to maintain or create possibilities for action, rather than from a striving for independence from support from other people.

Comparison of levels of functional independence in Study I showed some differences between groups based on the living situation (alone or together with someone) and use of formal support. All participants included in Studies II and III were living alone. Thus, this thesis could not provide in-depth knowledge about how a situation where the physical home environment constituted barriers for activity performance was experienced and handled by older persons living together with someone. Further studies are needed to explore older people's strategies to handle activity limitations in the home environment in relation to living situation and use of other people for support. There is also a need to further explore how such strategies relate to difficulty and independence in performance of activities of daily living.

The finding showed how the older persons' strategies stemming from their aspiration to create or maintain possibilities for action changed with a changing situation. Those changing strategies can be understood as the older persons' strategies to adjust their ongoing life to changing conditions, but still in accordance with their own values. Parallels can be drawn to empirical research showing that the ability to adjust life to changing conditions with a preserved self-image and meaning in existence

was experienced as the core aspect of quality of life among people aged over 80 years (Borglin, 2005).

In conclusion, findings from the empirical studies indicate that services aiming to support older people with functional limitations in their home environments should be directed towards supporting possibilities for action, rather than just supporting activity performance or functional independence. The older persons' aspirations to create or regain possibilities for action motivated them to develop and use strategies with a lot of struggle. This indicates that service aiming to support older people in their home environments can support older people's efforts at problem solving by facilitating for them to develop and use strategies with a reduced amount of struggle. In accordance with studies on activity performance of older people in the home (Gill et al., 1998; Heywood, 2004a; Petersson et al., 2008), the findings also highlight the importance of including other aspects than functional independence, for example difficulty, to understand needs for home modifications and planning for interventions on both individual and societal levels.

Negotiation of practical rationalities

To gain access to home modification resources, older persons' experienced occupational problems must be translated into eligible needs for such resources. Findings from Studies II, III and IV showed how this translation was performed through a process of negotiations of different practical rationalities. Practical rationalities were identified as the participants' answers to the question: "what is the good here?" (Mattingly, 1998). The findings show how the answer to this question changed with changing experiences of possible ways to act and with the conditions in each situation.

The findings related to practical rationalities are in accordance with a growing body of research showing that assessment and provision of health and social care services are performed through a process of negotiation between clients and individual professional actors (Griffiths, 2001; Olaison and Cedersund, 2006; Vassy, 2001) and between different professional actors (Allen et al., 2004a; Griffiths, 2001; Vassy, 2001). Understanding this negotiation process as a negotiation of different practical rationalities provides some explanations of service provision that cannot be explained through traditional rationalistic perspectives (Fischer, 2003). Practical rationalities were identified as the participants' strategies to act their values, within an experienced scope of action. This indicates that to understand service provision on both an individual and

societal level, there is a need to understand not only values of different involved actors, but how values are acted in the encounter between older persons and the service organisation.

Research has shown that clients' possibilities to influence the outcome of the negotiating process with an individual professional vary with the character of the organisation where the professional is employed and the client (Hellström Muhli, 2003; Johansson, 1992; Lipsky, 1980; Nordström, 1998; Olaison and Cedersund, 2006; Prottas, 1979; Seltzer et al., 2001). Findings from Studies II and III add to this knowledge an understanding how older people and professionals are guided by their practical rationalities in this negotiation process.

Findings from Study II showed that practical rationalities guided older persons, not only within the negotiations with an individual professional, but also guided their choice of whom to negotiate with. This highlights the importance of seeing all the different actors involved in the service organisation related to home modification services as a whole. This has also been addressed in a wider field of rehabilitation research (Lilja et al., 2003b; Wressle et al., 2002). In guidelines for client-centred practice (Law, 1998) it is stated that occupational therapists should facilitate access to resources with a minimum of bureaucracy for their clients. Findings from the studies included in this thesis imply that professionals and organisations involved in older people's home modification processes need to collaborate and communicate well in order to understand and support older people's practical rationalities.

The empirical studies in this thesis showed that the process of negotiation of practical rationalities related to home modification services could continue for nearly two years. Research on negotiations between older persons and professional actors has normally focused on a limited time (Hellström Muhli, 2003; Olaison and Cedersund, 2006; Richards, 2000). Findings from Studies II and III showed that the duration of older people's home modification process was characterised by changing situations and changing practical rationalities to handle the situation, associated with changing needs and expectations. In client-centred occupational therapy and other research on interaction between clients and professional actors, the importance of listening and interpreting client's needs and expectations has been addressed (CAOT, 2002; Seltzer et al., 2001). However, the ever-changing character of needs and expectations and their relationship to an ongoing service process have not been recognised. This thesis addresses a need to recognise the long-term and ever-changing

character of negotiations in both research and practice of assessment and provision of health and social care services.

The analysis of practical rationalities showed that both the older people and the included professionals expected all other actors involved in older people's home modification processes to share the same practical rationality. Therefore their acted judgements often included providing other actors with facts about components that were the basis for their judgements, expecting them to come to the same conclusion about what was the good in the specific situation. Those expectations of shared practical rationalities can be assumed to create misunderstandings and conflict, which was also to some extent confirmed in the empirical studies.

Different practical rationalities were found to be developed among home modification officers and occupational therapists in primary care, who can both be involved in the same individual older persons' home modification process. Similar findings have been demonstrated in the field of public health insurance and work rehabilitation (Grape et al., 2006) and the school environments of students with disabilities (Hemmingsson et al., 2007), showing how collaboration between different institutions that are supposed to work towards a shared goal and with the same individuals can be complicated by different institutional logics.

In conclusion, this thesis contributes to the body of knowledge about negotiations of needs and solutions between older people and professionals in a service organisation. By focusing on driving forces and relationships involved in the negotiations, findings from the studies included in the thesis add to existing knowledge an understanding of how the actors involved in negotiations are guided by an aspiration to implement what is perceived as the good. The findings also contribute explanations to some difficulties in negotiations of needs and solutions, showing that all actors expected the other involved actors to share their perception of the good. One implication of this is that there is a need for health care professionals to express their practical rationalities to each other and to their clients. In addition findings from the included studies showed that the older persons' home modification process was characterised by changing needs and expectations. A possible conclusion from this is that services can not be designed as ultimate solutions to specific needs, but must be continuously redefined. This means that there cannot be a perfect fit (Hemmingsson, 2002) between an older person and the home environment, but services provided must be seen as the best temporary solutions in temporary situations.

Rational for service provision

On a more concrete level negotiations of practical rationalities in older people's encounters with the service organisation related to home modifications were comprised of negotiations of definitions of needs and solutions. The older persons' experienced threatened possibilities for action had to be translated into eligible needs for home modifications. Findings from Studies II and III showed that this translation was performed through negotiations of practical rationalities, and that the older persons struggled in this negotiation process to get access to home modification resources that could support their possibilities for action. Findings from Study IV showed that the professional practice used in those negotiations resulted from relationships between different discourses and the professional situation of the included professional groups.

On a large scale, the older people's encounters with the service organisation related to home modification services can be understood as encounters with national and local policies and economical decisions related to welfare services in general, and home modifications specifically. The influence of organisational, political and economic conditions on health care practice in general (Bergmark et al., 2000) and occupational therapy specifically (Townsend and Wilcock, 2004; Whiteford and Wright-St Clair, 2005) has been addressed by researchers in those fields. Those researchers have concluded that resources and constraints constituted by politics, economy and organisational frameworks must be recognised in research and evaluation of health and social care services to understand the outcome of such services. It has also been concluded that such conditions need to be recognised to understand the professional practice of employees in health and social care services, for instance occupational therapists (Fischer, 2003; Grape et al., 2006; Whiteford and Wright-St Clair, 2005).

Study IV showed how discourses related to organisational, political and economic policies were transformed into local practical rationalities in two included professional groups. Local practical rationalities were found to emerge through balancing different societal discourses in the professional context, constituted simultaneously by discursive and non-discursive aspects. This illustrates that rationale and discourses shape each other (Davies, 2003; Fischer, 2003). Those findings highlight that organisational, political and economic policies are implemented through the professional practice of organisational employees (Grape et al., 2006). The findings also highlight that employees in societal institutions cannot be understood as technocrats who just apply societal and organisational policies and decisions (Fischer,

2003), but as actors who try to implement their perception of what is the good. Still, the findings from Study IV showed that the included professionals' perceptions of the good were related to large-scale trends in organisational political and economic policies in the Swedish society.

All studies in the thesis were done in the historical context of the aftermath of financial problems in the early 90s and ideological changes that have brought cost efficacy of welfare services into focus in politics and public discussions in Sweden (Bergmark et al., 2000) and other European countries (Parry-Jones and Soulsby, 2001). This trend coincides with the inclusion of ideas of individual self-determinism sought in policies of welfare services by service users' organisations in disability politics.

Even though most decision makers might have vague ideas of what constitutes true efficiency, raising thresholds for eligibility for services has been one method promoted to reach efficacy, resulting in an emphasis on needs assessment in policy and practice of welfare services (Bergmark et al., 2000). At the same time, assessment of individual needs has been one method promoted to reach individual self-determinism. The intention has been to provide services based in individual needs rather than on available resources. Together, the ideas of cost efficiency and self-determinism have led to a strong emphasis on needs assessment in policy and practice of welfare services (Parry-Jones and Soulsby, 2001; Robertson, 1997).

The consequences of needs-led assessment have been widely discussed. In needs-led assessment a need that is assessed as true is equal to eligibility for services, or with the right to such services (Agich, 1995; Robertson, 1997). This means that professional judgements of needs have a strong influence on provision of services (Parry-Jones and Soulsby, 2001). It also means that older persons who can formulate their needs as rights have an advantage in negotiations of needs and solutions compared to those who do not have this capability. In spite of the intention to provide services based on individual needs rather than on available services needs-led assessment has been shown to force older people to adjust their needs to available services rather than support self-determinism (Agich, 1995; Parry-Jones and Soulsby, 2001; Robertson, 1997).

The different principles behind needs assessment were shown to be reflected in the practical rationalities of the two professional groups included in Study IV. The right to resources, as an expression of the right to self-determinism, was found to be central in the perception of the good among home modification officers. The right to resources through assessment of eligible needs was found to be central in occupational therapists in primary care's perception of the good.

The majority of the individuals receiving home modification grants in the studied municipality (Johansson et al., 2007), nationally and internationally (Gitlin et al., 2001b; Iwarsson et al., 2007) are older people. However, the Swedish law of home modification grants is expressed in terms of disability policies, addressing rights and choice as bases for service provision. In contrast, welfare services for older persons are often framed in the terminology of care, addressing needs and frailty as bases for service provision (Kennedy and Minkler, 1998; Putnam, 2002). It is possible that the two local perceptions of the good identified in Study IV can be understood to reflect that home modification officers identified themselves as working in the field of disability services, while occupational therapists in primary care identified themselves as working in the field of care. This indicates that some of the differences in practical rationalities could be explained by the professionals' different identities.

It is not possible to tell from the findings in this thesis whether the older persons expected the home modification services to address their needs and frailty or their rights. However, the different practical rationalities found among the older persons could be interpreted as exemplifying strategies based on both the principle of care and the principle of rights. Satisfaction with the service process was not associated with a certain principle, but with whether the older person experienced a shared practical rationality with the professionals they navigated into. One possible conclusion from this is that there is no need to find the right principles for service provision; there is rather a need to develop methods to communicate and understand practical rationalities in the service organisation.

Findings from Studies II and III showed that the older persons' practical rationalities were constructed through the relationship between their values and their experienced scope of action. Their knowledge about available services influenced their experienced scope of action. To provide clients with relevant information to get informed and competent service users who can formulate their needs and get access to appropriate resources has been addressed as a part of client-centred rehabilitation and occupational therapy (Andrich and Besio, 2002; Law, 1998) as have the difficulties of making this happen (Wilkins et al., 2001). This thesis can contribute some explanations of those difficulties. Because the older persons' practical rationalities were their acted values, discrepancies in practical rationalities would not be eliminated by information and education about rights and duties within the service system.

It can be concluded from the discussion above that the negotiations of needs and solutions between older people and different professionals involved in their home modification processes took place in an ideological context including emphasises on cost efficacy and self-determinism. However, discourses related to those ideologies were transformed into local practical rationalities in the professional practice of the two included professional groups. Furthermore it can be concluded that different principles for service provision suit different individuals. What is most important for satisfaction with the service organisation appeared to be that practical rationalities, associated with different principles of service provision, were shared between the older person and the professionals.

The empowering potential of home modification services

This thesis found some potentials and constraints for home modification services to be empowering to older people who experience activity limitations in their home environment. Using the argument that enhancing older people's own efforts and problem-solving is empowering (Richards, 2000), findings from this thesis indicate that home modification services supporting older people's creativity and efforts to create possibilities for action has the potential of being empowering. From the discussions above, the findings can be interpreted to show that functional independence and needs-led assessment as guiding principles in policy and practice of health and social care services tend to constrain rather than support empowerment.

Contributing to empowerment by enabling agency has been identified as an important part of occupational therapy practice (Christiansen and Townsend, 2004). Agency has traditionally been defined as the autonomous individuals' possibility to act on a situation through thoughts, language and action (Christiansen and Townsend, 2004; Wray, 2004). A conclusion from the finding in the studies in this thesis can be that to support older people's agency, their practical rationalities must be recognised and understood by the professional actors.

Practical rationalities can be understood as an expression of agency. However, with a traditional definition of agency only practical rationalities that effect a situation in accordance with the actor's intention can be defined as agency. The findings related to practical rationalities showed that practical rationalities were the participants' strategies to act their values within an experienced scope of action. Development and use of strategies to create possibilities for action included a lot of struggle for the older persons, but did not always lead to the changes in situations in accordance with their

intention. Together with other research on older people and agency, findings from this thesis indicate that agency needs to be re-conceptualised to allow for the recognition of strategies used within an experienced scope of action (Wray, 2004).

From the findings in Studies II and III it can be concluded that older people's agency can be enhanced by increasing their experienced scope of action. This includes providing older persons with wider possible answers to their question asking how they can act in accordance with their values to create a situation that is in accordance with their preferences and values, rather than providing them with means to maximize self-determination and decision-making opportunities (Eales and Keating, 2001).

The older persons' aspirations to create possibilities for action can be understood as an aspiration to create situations where they experienced that they could act through thoughts, language and action in accordance with their values and preferences.

However it should be noted that from the results of this thesis, these possibilities are rather to be seen as emerging from thoughts and actions where individual agency is one component in an interaction with others. Those findings support the suggestion that agency should be conceptualised as creative and generative to allow for the recognition of strategies used to deal with constraint and disempowering experiences (Wray, 2004). In line with this suggestion, policy and practice aiming to support older people's agency need to recognise how values of importance for older people and their experiences of constrained and disempowering situations interact with their efforts at problem solving.

In conclusion, findings from the included studies indicate that if service users' creativity and efforts are recognised as resources in design and provision of services, service aiming to support older people with functional limitations in the home environment might have the potential of being empowering. Furthermore, the findings suggest that older people's creativity and efforts should be understood as expressions of their answers to the question of how they can act in accordance with their values to create a situation that is in accordance with their preferences and values. One implication of this is that to support agency, the service organisation related to home modification services needs to provide a wide array of possible ways for the older person to act in accordance with their values.

METHODOLOGICAL CONSIDERATIONS

This thesis has the ambition of contributing theoretical and empirical knowledge about interactions between older people's ongoing everyday lives and the service organisation relating to home modification services, using a transactional perspective. Different designs and methods have been used in the four included studies and thereby the weaknesses of a single approach could be diminished (Polit & Beck, 2004). In the following some methodological challenges will be discussed.

The design

In this thesis a transactional perspective has been used, meaning that its focus was on driving forces and relationships connecting different aspects and actors involved in older people's encounters with the service organisation related to home modification services. The concept of place integration was explicitly developed as a tool to research ageing empirically in context with a transactional perspective (Cutchin, 1999). I have chosen to use this concept, first in Study III and then to integrate findings from all studies included. I have also used the organisational field concept (Grape et al., 2006) to define a situation from an organisational perspective. The concept of practical rationalities was used, first in Study IV, and then to integrate all findings from the included studies. I considered those to be useful tools to achieve an understanding of the encounter between older people's ongoing lives and the service organisation related to home modification services from a transactional perspective.

A need for a transactional perspective to understand ageing in context and provision and effects of health care services has been addressed by many researchers (Cutchin, 2003; Fischer, 2003; Grape et al., 2006; Griffiths, 2003; Law et al., 1996). These researchers have also addressed the methodological difficulties associated with this perspective. The lack of empirical studies using a transactional perspective can be assumed to reflect those difficulties. However, it has been concluded that research that does not recognise the transactional character of human life fails to detect and explain effects of service provision (Cutchin, 2003; Cutchin, 2004; Dickie et al., 2006; Griffiths, 2003). It also fails to explain or predict organisations' behaviour and changes (Fischer, 2003; Grape et al., 2006; Griffiths, 2001). Conducting research with a transactional perspective demands a change from traditional study objects such as variables, phenomena and experiences to situation-based study objects that allows for a

flexibility to include aspects that appear to be relevant for understanding a situation and transactions between situations. Such study objects have been termed situations (Cutchin, 1999; Cutchin, 2003; Law et al., 1996) or fields (DiMaggio and Powell, 1983; Grape et al., 2006). One could argue that using methodologies and theories of social anthropology could have been more fruitful since they have a more situation-based approach. Ethnographic methods can provide holistic and inclusive understandings of everyday situations and transactions between situations (Marcus, 1998), but was not used in any of the studies in this thesis. However, an “anthropological thinking” has influenced and facilitated a transactional approach to the interpretations of the studies included in this thesis. With this approach, older people’s experience and actions could be integrated with cultural and social ideologies and practices. Still it can be questioned whether a transactional understanding has been achieved, and what the consequences are of the limitations of included aspects and actors.

For practical and ethical reasons, it is not possible to gain access to the full ongoing everyday life of anybody, even yourself. In this thesis interviews were the main method used to collect data on the ongoing lives of older home modification applicants. In Studies II and III interview methods allowed for flexibility of inclusion of aspects that turned out to be relevant to the situations of the included individuals. Nevertheless it can be questioned whether a transactional perspective can be achieved when data is collected on different occasions, including retrospective descriptions of what has happened in between. The practical, theoretical and ethical difficulties of following individuals continuously over longer periods of time call for development of new methods for research on the process of human occupation and ageing.

The findings in this thesis reflect specific situations during the studied period, with respect to conditions in the service organisation and in the individuals’ lives. This means that caution should be taken when transferring the findings to other socio-cultural, organisational and time situations. However, the findings are in accordance with other research related to effects of home modifications on independence and safety (Fänge and Iwarsson, 2005b; Heywood, 2004a), indication that the findings from the studies in this thesis can provide knowledge relevant to understand the dynamics of independence and safety in different socio-cultural, organisational and time situations. All included studies were conducted in one Swedish municipality, and the findings reflect characteristics of the local service organisation. The findings showed how the

service system influenced experiences and effects of home modification interventions, which highlights even more the fact that the results reflect a specific context. This emphasizes the need of research on home modification services in different organisational and cultural contexts, with which to compare and extend empirical and theoretical findings from this thesis. On the other hand qualitative studies such as II, III and IV in this thesis did not have the intention of searching for generalisations, but rather of indicating a reflective thinking that could be used in other socio-cultural, organisational and time situations in home modification processes.

Inclusion of participants

The sampling procedure used for home modification applicants for the studies in this thesis may have limited the inclusion of participants to persons with health conditions that are not representative. The inclusion criteria can be assumed to have selected persons in better health than older persons in need of home modifications generally are in the municipality where the study was conducted and elsewhere. The sampling procedure for Studies II and III can be assumed to have further selected for persons in better health and persons who have possibilities to benefit from the service system by their relative talkativeness. This emphasizes the challenge of reaching those who are in greatest need of home modification services. Given the importance of the service organisation found in those relatively advantaged groups, the need of further research on how services can be designed and provided to meet the needs of more vulnerable groups is striking.

The inclusion criteria of cognitive capacity excluded a group of applicants for home modification with dementia and brain injuries. This is a group that to an increasing extent live in their own homes in the community and for whom a service organisation that is sensitive to their preferences, needs and values is of crucial importance. Further studies are needed here, using methods suitable for this group, to provide knowledge that can contribute to service design and provision meeting the needs of older persons with reduced cognitive capacity.

The inclusion criterion of being able to speak and understand the Swedish language can also be assumed to have excluded a group whose possibilities of benefiting from social services depend on the interactions within the service organisation. This inclusion criterion has also reduced the studied situations to relatively cultural homogeneity. The participants in Studies I, II and III had all experienced stability in life situations relating to housing and neighbourhoods. Studies

II and III address the issues of agency and empowerment. Understanding what constitutes agency and empowerment in the context of ageing requires analysis of underlying cultural features such as values, beliefs and norms (Wray, 2004). Therefore the findings relating to those issues that are based on a sample that can be assumed to represent limited cultural variation compared to the general Swedish population should be interpreted with caution. Inclusion of situations involving people with wider cultural spectra would of course involve some methodological and theoretical challenges. However, I consider this to be more a problem of resources. None of the members of our research group spoke any of the non-Swedish languages spoken by larger groups of immigrants in Sweden, and no resources for interpreters were available.

To conclude, there is a need of more research on the topics of home modifications and service provision to older people, designed to include a larger cultural variation and a larger variation of life histories among the participants.

Studies I, II and III included older persons who had expressed their needs related to activity performance in the home environment through an application for a home modification grant. It can be assumed that the group applying for home modifications grants is not equivalent to the group in need of home modifications, nor is it equivalent to the group experiencing environmental barriers at home. It could well be that other reasons besides mere difficulties in performance of activities of daily living are important for seeking home modification services. It has been shown that accessibility to and use of service systems is to a large extent determined by the person's knowledge of the service system (McCreadie and Tinker, 2005). Further studies are needed in order to increase the knowledge of utilisation of applications for home modification grants, as part of the efforts at problem solving used by older persons. There is also a need of research including people who experience activity limitations but have not sought home modification services, in order to understand other strategies of handling problems related to activity performance in the home environment.

A situation-based perspective including the service organisation related to home modification services means that all organisations and individual professional actors involved in the older persons' situation relating to activity limitations in the home should be included. In Study II the organisational field was defined by the process described by the participants. Findings from Study III show how organisations and actors related to other services, such as home help and assistive devices, were involved in the transactions in everyday life. This indicates that to understand how older people's ongoing lives interact with the service organisation related to

performance of occupations in the home, we need a wider definition of the organisational field. In Study IV the concept of organisational field (DiMaggio and Powell, 1983) was used to identify the study object. The four included studies cover complementary and overlapping parts of the organisational field of home modifications services, but can be assumed to cover only a limited part of this organisational field. The methods used in this thesis excluded institutions, actors and documents relevant to understanding of the interaction between older persons' ongoing lives and different organisations and actors involved in the home modification service process. In spite of this the study design allowed for following what happens in the home modification process. It also made it possible to identify issues that need to be investigated further.

In conclusion, more extensive studies are needed to further develop a theoretical and empirical understanding of the process of ageing in place and its relationship to service delivery. The theoretical perspective of place integration needs to be further explored, but there is also a need to explore other theoretical perspectives and methods to understand the complexity of the meeting between older persons' ongoing everyday lives and a service process.

ETHICAL CONSIDERATIONS

This thesis is based on data including older persons' and professional actors' experiences and thoughts, which they were willing to share with the researchers. Findings in the included studies result from my and my co-workers' interpretations of those experiences and thoughts, which constitutes an ethical dilemma about violating people's own interpretations of their experiences. The ambition of scientific interpretation is to provide a theoretical understanding of an issue or situation, providing a new understanding that can be empowering by offering a possibility to understand and change a situation. It also aims to provide knowledge that can be used on the societal level, to design services and understand societal processes. In Studies III and IV the interpretations were done from a strong theoretical perspective. This involves a risk of distancing from the data. In these two studies the dialectics between data-near and data-distanced interpretations were used to reduce this risk. On the other hand it can be argued that using a strong theoretical perspective strengthens the trustworthiness of the studies as the interpretation is based on existing theoretical knowledge rather than only on the researchers own reflections. A strong theoretical perspective also makes explicit the perspective used by the researcher.

Data collection for Studies I, II, III was carried out in the participants' homes. In consideration of the participants' integrity this demanded that the interviewers were sensitive to values and habits associated with the individual older persons' homes. As a guest in the participants' homes, the interviewers were cautious to be alert to participants' expressions of discomfort with the interview situation. The interviews were adjusted to such expressions, and were interrupted if the participant showed serious expressions of discomfort with the interview situation. None of the qualitative interviews was interrupted.

The data collection concerning home modification applicants (Studies I, II and III) involved time-consuming interviews. One inclusion criteria was that the home modification applicants had to be in a health condition that allowed participation in the extensive study interviews included in the longitudinal study. The interviews could nonetheless be experienced as tiresome by the participants. The interviewers were observant of this situation, and some of the interviews for Study I were split into two sessions because the interviewee expressed or showed signs of tiredness. The in-depth interviews included in Studies II and III were even more time-consuming. Data collection in those studies included repeated interview situations. This might create a confidential relationship between interviewer and interviewee. This confidence can make it easier for the interviewee to express discomfort with the interview situation if necessary. It can also make it easier for the interviewer to ask direct questions about how the interview situation is being experienced. On the other hand this confidence can create difficulties for an interviewed older person to express or show discomfort with the situation; he/she may be unwilling to cause problems for the interviewer and the research project.

Home modification applicants were recruited through the home modification department and the first information given and the invitation to participate in the research project were communicated by home modification officers. This might have led to confusion about the relationships between the research project the home modification service process for the home modification applicants. Therefore it was stressed in both written and verbal form that the research project and the interviewers were not part of the home modification service process, and that the interviewer had no possibilities to influence the individual service process either negatively or positively.

FUTURE STUDIES

The studies in this thesis showed how older people's creativity and efforts at problem solving were directed towards activity performance and towards gaining access to home modification services by older persons who had applied for such services. To better understand how creativity and problem solving can be supported for older people experiencing activity limitations in their homes, there is a need to understand the process of problem solving before a need of services from the society is identified. There is a need to better understand how maps of the service system are constructed, to design services, and communicate services that target persons with appropriate needs. Therefore further studies are needed that address older people's efforts at problem solving at a time in the process when a need for services from society has not yet been defined. Such studies would also include efforts at problem solving among older people who never search for services from the society.

The studies included in the thesis focus on a very limited population. There is an emerging need of research for understanding ageing in a changing world (Phillipson, 2003; Wray, 2003), indicating a need of research on this topic, including a larger cultural variation and a greater variation in participants' life histories than could be provided in this study.

Negotiation of practical rationalities was a central finding throughout the thesis. However none of the included studies included data on how the negotiation of practical rationalities was expressed in real situations relating to individual cases. This indicates a need for ethnographic studies to understand how practical rationalities are acted and interacted in real situations, and the resulting outcomes in individual cases. There is also a need to increase understanding of how negotiation processes related to the ongoing life in the home environment are perceived and handled by older persons with functional limitations.

CONCLUSIONS AND CLINICAL IMPLICATIONS

In policy and practice of health and social care services there is a need to know to what aspect services should be targeted, and when services should be provided to be efficient. In this thesis a transactional perspective was used to increase the understanding of driving forces and relationships connecting different actors and aspects involved in older people's home modification process. One possible conclusion from a transactional perspective could be that everything is connected to everything, and all processes are ongoing forever. This conclusion is attractive from a theoretical and philosophical perspective, providing a more adequate understanding of human action and occupation than what is possible with traditional perspectives and models with a more reductionistic and static perspective. It could be questioned whether a transactional perspective can provide fruitful knowledge for policy and practice of services aiming to support older people living with functional limitations in their home environments. However, as was concluded in the introduction, theories and methods that do not recognise the changing character of issues involving human action and occupation fail both in providing theoretical understandings of human action and society, and in evaluating and designing social policies and service provision. It is a challenge for researchers, policy-makers and health care practitioners to apply theoretical knowledge of the complex character of human phenomena in design and provision of services. This thesis contributes with theoretical knowledge about driving forces and relationships that connect older people's efforts at problem solving in their everyday lives with policy and practice of the service organisation related to home modification services.

In clinical practice and policy-making there is a need to evaluate the effectiveness of provided interventions, both on the level of the individual and on the level of the society. Effectiveness means that the provided intervention achieves what it was intended to achieve. According to the general guidelines for health and social care services, the intention of such services is to meet needs defined by the services users. This thesis contributes with knowledge about how older people with functional limitations define and communicate their needs.

Home modifications have a potential to be efficient if the intention with provision of home modification interventions is to support possibilities to perform activities in accordance with preferences and values for persons with functional

limitations. This intention is in line with the strive for independence as defined by the Independent Living Institute and the social model of disability. According to the Swedish law of home modification grants, the ambition of the grant is to facilitate for persons with functional limitations to live an independent life in their homes. The law does not include a definition of the concept of independence. Most research on effects of home modifications has used functional independence as a measure of efficiency. If the intention of home modification interventions is to improve functional independence, research show that home modification services are not efficient. However, with a definition of independence in accordance with the disability movement and social model of disability, findings from this thesis show that home modification services can be efficient.

Findings from the studies included in this thesis have implications for policy-making relating to service provision to older people in their homes as well as for clinical practice on the level of health and social care professionals who meet older people in their professional practice. The findings indicate that:

- in clinical practice, older people's needs must be understood in relation to their strategies to handle their situations. Providing client-centred and empowering services thus means that service providers need to recognise the changing characters of needs stemming from older people's strategies to handle their situations.
- in client-centred practice, it is not enough to define and respect clients' values. Service providers need to understand how values are expressed in practice, and the changing needs that occur in relationship to clients' practical rationalities. In this thesis practical rationalities were identified as acted values within an experienced scope of action. This means that to understand needs of home modification in relation to older people's strategies to handle their situations, practitioners need to approach both the participants' values and their experiences of scope of action.
- to support older people's agency, service providers need to increase older people's experienced scope of action. This means that in clinical practice there is a need to understand how experienced scope of action is determined by individual older persons' values and their understandings of responsibilities and eligibility within the service system.

- to provide services that are empowering to older people in their homes, service provider need to recognise and enhance older persons' creativity and efforts to create situations with possibilities to perform activities in accordance with their preferences and values. Older people's creativity and efforts at problem solving must not be seen as something that intrudes on the service process, but as a resource in this process.
- difficulty in performance of activities of daily living is a better measure of older people's needs for home modifications than functional independence. Even though measurement of separate variables is not consistent with a transactional perspective, such measurement might be of importance in clinical practice. Findings from study I and III in this thesis can be used to operationalise appropriate variables for measuring needs for home modifications.
- professionals involved in older people's home modification process need to develop communication techniques to express and communicate their practical rationalities to each other and to their clients. The findings showed that both professional and older persons expected other actors involved in the home modification process to share the same practical rationalities. An implication from this is that there is a need to make practical rationalities explicit to avoid misunderstandings and conflicts in older people's home modification process.
- an approach that recognises the changing characters of older people's ongoing life and its interconnectedness to the service organisation is needed in education of future professionals involved in older people's home modification process.

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