

RIGA STRADIŅŠ UNIVERSITY

Signe Tomsone

**ASPECTS OF HOME AND HEALTHY AGEING AMONG
VERY OLD EUROPEANS:
A LATVIAN PERSPECTIVE**

Doctorate thesis

(Speciality – rehabilitology)

Supervisor:

Professor Jānis Zaļkalns, Riga Stradiņš University, Latvia

Scientific consultant:

Professor Susanne Iwarsson, Lund University, Sweden



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Abbreviations

ADL- activities of daily living

EC- European Commission

ENABLE-AGE- research project “Enabling Autonomy, Participation, and Well-Being in Old Age: The Home Environment as a Determinant for Healthy Ageing” (2002-2004, EC funded)

EU- European Union

HALE - healthy life expectancy

I-ADL - instrumental activities of daily living

ICF- The International Classification of Functioning, Disability and Health

ICD – The International Classification of Diseases

LE - life expectancy

P-ADL - personal activities of daily living

P- E fit - person- environment interaction

QoL - Quality of Life

UN- United Nations

WHO- World Health Organization

Definitions

Activity is the execution of a task or action by an individual [1]. In this thesis is used interchangeably with occupation as used in occupational therapy [2]. Occupation refers to groups of activities and tasks of everyday life, named, organised and given value and meaning by individuals and culture. Occupation is everything people do to occupy themselves, including looking after themselves, enjoying life and contributing to the social and economic fabric of their community [3].

Activities of Daily Living are activities that serve to maintain one's self and lifestyle. The activities are major components of the routine in everyday life, and are generally private and personal [4]. ADL is often classified as personal ADL (P-ADL), comprising activities such as hygiene, dressing, etc., and instrumental ADL (I-ADL) comprising activities such as shopping cooking and transportation [5].

Autonomy is the ability of the individual to carry out the necessary tasks of living to function within society. Autonomy could be regarded as a multidimensional construct on behavioural and cognitive levels, covering both behavioural competences to perform necessary everyday tasks, as well as being cognitively able to make decisions based on own reflections.

Environment is the external social and physical conditions or factors which have the potential to influence an individual. It refers to the physical context within which people live, comprising both the natural and man-made environment.

Health defined by the WHO emphasise a holistic perspective of psychological, social and physical well-being. The "medical" model defines health as the absence of disease. Other definitions suggest that good health is the functional capacity of the individual to carry out everyday tasks.

Healthy ageing is a broad concept based on the WHO-conception of health. Within this thesis healthy ageing is understood as a framework concept, based on the ICF, covering a broad range of aspects of physical, mental and social health, such as autonomy, well-being and participation.

Home defined as physical, social and psychological interchange process between the person and her/his living environment [6]. The phrase "living environment" is often used to describe the immediate socio-physical setting of the individual's home environment, it may cover also parts of the outdoor space and the neighbourhood.

Housing generally refers to people's houses at the social and policy levels. Housing policy can include policy on social housing, or targets for house building etc. The key considerations are the level of provision of housing (quantity), type of housing, and appropriateness of housing (quality) in terms of standards, affordability etc.

Housing adaptation denotes measures taken in order to adapt the persons physical housing environment in relation to individual needs, based on a professional judgement of a person's functional capacity and restricted participation.

Independence is the dimension of autonomy which is connected to the level of functioning, and the ability to perform activities of daily living without assistance. In contrast, dependence is the loss of ability to function independently and autonomously in the activities of daily living, and in fulfilling meaningful social roles. To be dependent does not necessarily mean to lose autonomy.

Old and very old age in this thesis is defined for people aged over 75 years, moving into the fourth age, and consider also differences in life expectancy among East- and West European countries. A distinction can be made between the “Third Age”, as a time of freedom and activity in later life, and the “Fourth Age”, the final phase of life that is often associated with illness, frailty and dependency.

Participation by WHO [1] defined as extent of the persons involvement in life situations. The proposed definitions of involvement “incorporate taking part, being included or engaged in an area of life, being accepted, or having access to needed resources”. Currently empirical data are scarce about the every day life and subjective evaluation/relevance of the different aspects of participation in old age.

Quality of Life can include many attributes; health, personal relationships, physical environment etc. It can also include “objective” attributes, education, services, etc and “subjective” attributes (how the person perceives or experiences those things) [7]. QoL is a fundamental basis for contemporary social thinking. E.g. greater longevity within modern society is not necessarily a good thing if extension of life is not accompanied by a good quality of life.

Well-being is widely accepted as subjective and important dimension of QoL. It includes both an emotional domain relating to a person’s affective state, and a cognitive domain relating to global judgement of life as a whole, as well as domain-specific judgements such as family, leisure, health [8- 11]. Also often seen as the adaptation to the changes that occur during the ageing process [12].

1. Introduction

Considering the global population ageing process with increasing proportions of old and very old people, it is very important to understand and increase our knowledge on ways to support healthy ageing. The components of good health are related to e.g. social and economic factors, physical activities, psychosocial support and societal services such as medical care.

Problems of aging are a reality for all the countries in the world. The questions on aging and factors affecting the aging are important issue among the international organizations, broad range of specialists and researchers for many decades. We are living in the world with the rapid changes in economic, social and cultural traditions, attitudes and all these factors shape the process of aging and therefore research in this field still needed.

The European Commission (EC) has stated that low birth rate, continued grow of prospective life expectancy and retirement of „baby boom” generation will change dramatically number and age structure of European inhabitants in next decades. The ageing of inhabitants will cause the economic, budget and social problems. It will significantly impact the development and will cause the pressure to increase the state expenditures which will create the problems in long term to maintain stabile state finances [12]. With the continuing growth of elderly population in modern societies, it has become a matter of increasing urgency to look for ways to maintain and improve the functional abilities of ageing people, to help them cope independently in the community and ultimately, to raise the quality of their lives.

The fast aging of population in Latvia increases the demographic pressure. Moreover, because of the high rates of chronic diseases, poverty and lack of possibilities to participate in social life, old and very old people have to struggle for survival instead of good personal and social life. The society loses life experience and knowledge of elder people; also the expenses related with social and health care increases. According to the existing data in Latvia there are many elder people who do not receive any support from their children because the children are poor, too [13]. There is a need to receive the health and social care among old people in relation to the functional changes as result of aging. The expenses for these services increase and probably the way to improve the quality of life for old people is promotion of healthy and active ageing.

The National plan for Latvia development [14] state that necessary to create preconditions of good health during life course, popularize and develop prevention, to create public opinion that health is value and improve health care system. As many factors (biological, social, economical, environmental and habitual) influence health, the process of increasing well-being of population is complicated. To achieve such general goals for elderly, the research, focused on old people perception of wellbeing, aspects of ageing and factors affecting this process, is needed. There is knowledge and experience worldwide but the specific knowledge in Latvia can provide an evidence base for the development of social policy as well as health and social care practice in local context.

2. Study rationale

Traditionally in Latvia health care professionals understand the functional abilities of person using the medical terminology, with accent on body structure and body functions. Within this thesis there is attempt to emphasize the meaning of activities and participation as interaction between health status, environmental factors and personal factors, which according to the concepts of WHO ICF [1] about contexts have impact on healthy ageing and quality of life for elderly.

Due to the changes of health and functional status old people often need the medical as well as social care services. As the result of systemic changes in Latvia, currently there is a division of rehabilitation services into medical or social, with different sources of financing. The changes in social policy in Latvia during last years tend to develop rehabilitation and care services in the community. Rational and effective services should be oriented to the needs of clients and it is important to find out appropriate evaluation methods to assess the needs as well as service effectiveness. There is experience in Latvia of functional evaluation in the clinical settings but to do such evaluation in individual's home environments is in the beginning. Besides traditional therapeutic techniques to improve the person's functional abilities there today are available compensatory technical aids and basic home adaptations also.

The level of everyday activities performance can serve as indicator of functional health status among elderly but so far there is very little known in Latvia about very old people's abilities to perform everyday tasks in ordinary housing environments, the most important difficulties they are experiencing and factors affecting the level of functioning. There is lack of knowledge in evaluation of functional abilities of elderly people in the home setting and lack of experience of implementation them as base for the development of in developing appropriate services, which are necessary to support independent living at home among old people, as long as possible. Such knowledge will facilitate the developing and implementation strategies to promote the healthy ageing process in society and research is needed to prove the evidence in local context and promote the best practice in field.

3. Aim

The overall aim of this project was to explore the everyday activity performance aspects and deepen knowledge on factors influencing performance (focus on housing), in order to come up with recommendations for development of health promotion, rehabilitation strategies and planning more efficient services supporting health among very old people living in ordinary housing in the Latvia.

4. Study objectives

- To deepen knowledge on meaning of everyday activities performance among very old people living in ordinary housing in Latvia;
- To explore the patterns of relationships between aspects of housing and healthy ageing in very old age and explore whether or not comparable relationships between housing and healthy ageing do exist in five European sub-samples (Sweden, Germany, the UK, Hungary, Latvia);
- To investigate whether and how objective and perceived aspects of housing are related to perceived health among very old single-living people with different levels of dependence in activities of daily living (ADL) in three European sub-samples (Sweden, Germany and Latvia).

5. Literature review

5.1. Old People in Latvia

Since the thirties of the 20th century, Latvia has been one of the demographically old states and nations and the ageing process continues after Second World War because the low birth rate and partly growth of life expectancy when bigger part of population achieve age of 60 and 70 years and also different thresholds of ageing as well as migration (almost younger people emigrate) facilitate this process [15].

Based on Eurostat data in 2005, 16.5% of Latvian population were over 65 yrs and 3% of them were older than 80 yrs [16] and prognosis is that this part of population will grow till 21.4% in 2031 and 26.5% in 2051 [17]. The demographic situation in Latvia is very uptight because the natural growth of inhabitants is negative since 1991. There are two tendencies – low birth rates and fast population ageing. Comparing the data on population in age group 0-14 and age group 65+ among Baltic and European countries, Latvia is one of the demographically oldest states, signalling fast population ageing [18]. In 2000, 21% of inhabitants were older than 60 yrs in Latvia and it is about 7.6 % more than in 1989. Due to decreasing birth rates, the generation change level is only about 55% [19].

Since 1993 the density (specific weight) of people over retirement age is higher than children and adolescent density in population. There was 1.5 higher numbers of people over retirement age than numbers of children and adolescent on 1000 working age inhabitants. Figure 1 shows changes in demographic pressure, number of inhabitants in working age group and group of inhabitants over working age, comparing years 2000 and 2006 [20].

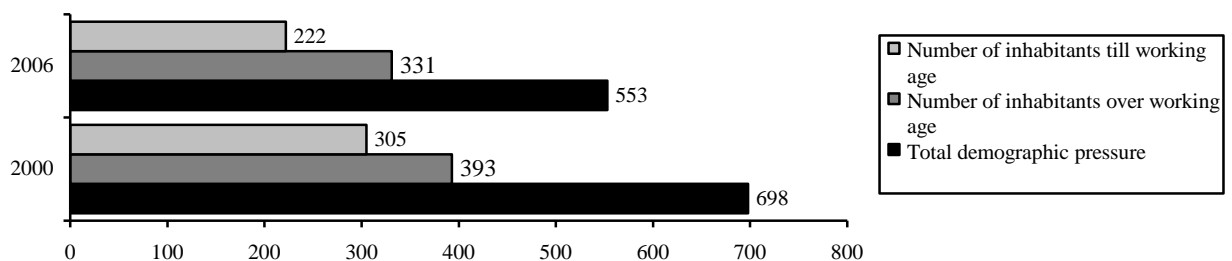


Figure 1. Demographic pressure in Latvia, years 2000. and 2006.

The intensity of population ageing in Latvia is high like the average in most of other European countries and shown by the mean age of population. At the beginning of 2006 the mean age in Riga was 41.5 yrs (38.9 yrs in Europe).

Do to the low birth rate, prognosis show that total number of inhabitants in county will decrease but the number of people over retirement age as well as specific weight of this group will increase. Over working age there were 20.8 % people from population of Latvia in the end of the year 2004. At the end of 2001 most of retired people – 68.6 % were aged 60-79 years. From 2006 to 2050 the number of people older than 65 yrs will increase more than 100 thousands. In 2050 the every third person in Riga and totally in country one fourth of inhabitants will be at the age of retirement (over 65 yrs) [21]. The majority of the aged people are women and in line with the increase of the age the disproportions of gender increase as well (Figure 2.) [20].

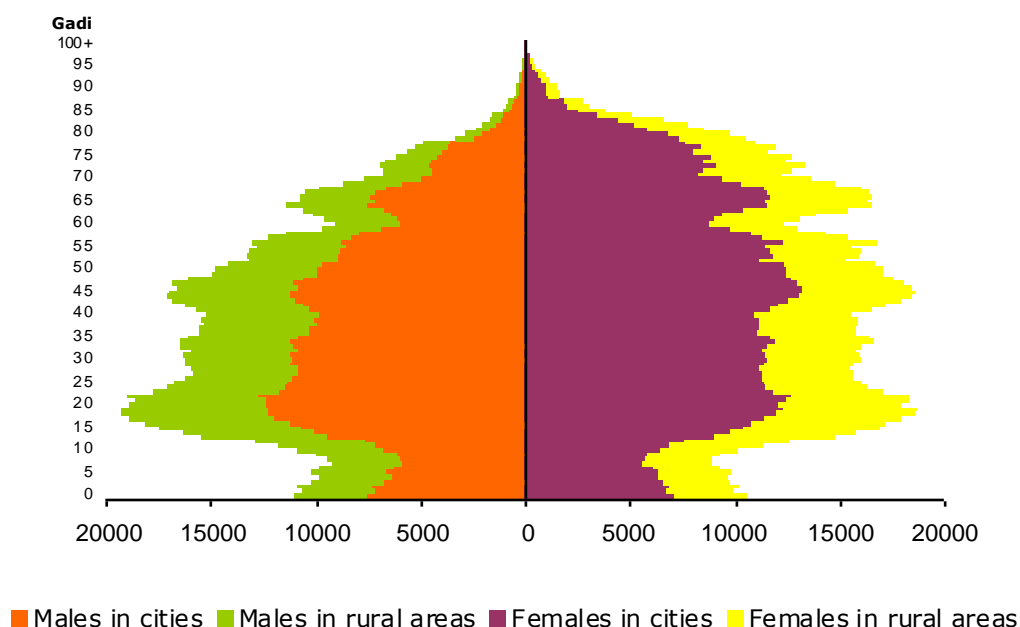


Figure 2. Age pyramid of Latvian inhabitants, beginning of year 2006.

Latvia has one of the lowest life expectancy (LE) rates in Europe. There is tendency slightly improve this rates – in 2005 the women had 77.4 yrs but men- 67.4 yrs. Comparing with the EC data this is about 8 years less for men and 4 years less for women [22]. There is lower LE among inhabitants in rural areas comparing with inhabitants in cities. In 2003 the average LE for men in cities was 66.2 yrs but for men in rural areas 64.75 yrs. Also there was difference among women in cities and rural areas about 1.26 yrs. The Latvian University and Central Statistical Bureau prognosis of life expectancy is an increase for

men from 64.2 (1997) to 69.5 (2025) and for women from 75.9 (1997) to 79.5 yrs (2025) [17, 23].

In addition to LE, it is increasingly important to know the expected length of life spent in good health. WHO uses healthy life expectancy (HALE) indicator for this purpose, subtracting estimated years of life spent with illness and disability from estimated LE. For Latvia it is estimated that people can expect to be healthy for about 89% of their lives. They lose an average of 7.5 years to illness expressed by difference between LE and HALE. This loss is quite similar to the Eur_A average (7.3 yrs) and the Eur B+C average (7.6 yrs) [24].

The available information show that in Latvia data about health and welfare of people aged >65 years are incomplete. There is some research on wellbeing among old people and factors affecting it [25, 26] only recent past years. The lower rating for life quality among old people could be explained by higher importance of health care and social programs in their lives and the current problems in those areas [26]. The data concerning health conditions of elderly people in Latvia show that the most important problems are dementia, depression, suicides, tumors, cardiovascular diseases, osteoporosis, incontinence and trauma. Average life expectancy for females is higher than for men but these additional years are related with chronic diseases and disability, especially at age over 80 years [27].

After regaining independence in 1991, there were changes in political and economical situation in Latvia. Many people lost work, lost savings and had difficulties to manage everyday life economically and old people were one of the unprotected groups in society. The social assistance system started develop and community social assistance services were established in 1992. The municipalities took care of basic inhabitant needs, such as social allowances, divided relief consignments from foreign countries, support care of person at home and relocated persons to social care institutions. Until the middle of 1990-ies the assistance to inhabitants was based on belonging to the social group, not considering the individual needs and recourses of person. The system was expensive, non flexible, not sufficient to the clients need and did not support individual activity and participation in society. The reforms in social assistance system were introduced in 1996, with aims to change the principles of financing the system, create the new order of social assistance and care services taking into account the person's individual situation and to

develop alternative care services available at the person's place of residence [28]. Alternative care, like home care, service flats, day-care centres and support from municipal institutions are other possibilities to solve the problem for older people to stay at home as long as they would like. The municipalities were responsible for implementation and organization of alternative care but there were financial problems to provide these services. Since 2003 the new "Law on provision of social assistance and services" [29] came into force and the range of alternative care services grow as well as number of persons receiving these services. Still there are needs to improve availability of services equally in all parts of Latvia territory and also increase quality of services [30].

In 2001 the Latvian Republic Cabinet of Ministers accepted the Public Health Strategy to facilitate the health policy implementation and to improve the situation in the public health. This is the main strategic document that describes the aims and tasks in area of public health and it is developed based on WHO strategy for European region „Health for everyone in XXI century”. Public Health Strategy [13] stated that a significant number of old people have limited help from relatives, and state and community health and social care services are limited. There is plan to improve the situation of old people, to increase the possibilities to live untill the old age and maintain a good quality of life. For inhabitants older than 65 yrs, it is necessary to support realization of all health potential, facilitate the participation in social life, especially among very old group; enable healthy aging, to maintain the dignity, independence in daily activities and societal participation. To achieve such general goals, research, focused on old people's perception of wellbeing, aspects of ageing and factors affecting the healthy ageing process, is needed.

5.2. The Process of Ageing

Ageing is the natural progressive decrease of organism functional abilities and increase of natural reasons of death in relation to the chronological age of person. Ageing could be viewed from different perspectives: chronologically, biologically, psychologically and socially. Chronological age represents the number of years from person's birth and is commonly used as a basis for many services, screening and investigations [31], but in fact it does not say much about a person's functional ability. The biological age represents cell changes and affects the functional capacity of the body organs. Biological theories of ageing can be arrayed from the molecular level, to the cellular, to the systemic, and, finally, to the evolutionary level. Molecular theories of ageing focus on the extent to which

cellular function and integrity changes over the time and based on gene regulation and random molecular damage. These theories include the proposition that the accumulation of environmental damage is associated with age-associated errors and cellular malfunction. Cellular theories of ageing represented by free-radical theory and theory of replicative senescence. System theories of ageing are based on ageing and the regulation and coordination of organ systems, e.g. immunological function declines with age. Evolution theories address the ageing of human species and considers that ageing is genetically programmed, it is an adaptive process to facilitate the turnover of generations and recently assume that ageing is probably caused by the gradual and progressive accumulation of damage in the cells and tissues that comes from the need to react and adjust to changing and demanding environment [32]. This theory suggests that ageing is to some extent malleable and within our control. Such malleability is also considered with the co-existence of disability with older age. Other theories consider that disability is not caused by ageing, but strongly associated with it, and that healthy lifestyles can delay the onset of disability, compressing morbidity into fewer and later years [31].

Psychological ageing is considered to occur at any time, involving the concepts of maturity, wisdom and senility. Social ageing is experienced by the individual in terms of change of roles and relationships within the family and work, in terms of both positive and negative attitudes within the social environment during the life span.

The retirement age of 65 years (in most European countries) is often adopted as an arbitrary point for defining people as older, but older people constitute a very heterogeneous group with different capabilities. Consequently, several researchers have emphasized the importance of separation the youngest old from the oldest old [33]. There are different types of division principles into age groups, but in the literature often people in the age group 65- 75 years are called “younger old”, those in the age group 75- 85 years “mid-old”, and people aged 85 years or more as “old-old” or “very old”. Baltes and Smith [34] suggested an alternative approach to differentiation, namely the Third age and the Fourth age. One of their definitions is a transition from the Third to the Fourth age when 50% of the birth cohort is no longer alive (in Western countries usually around 80- 85 years). Most important, their differentiation emphasizes a highly individualized ageing process based on functional characteristics, thus not strictly connected to chronological age. That is, the Third age represents rather good physical and mental function, a high level of emotional and personal well-being and efficient strategies for gains and losses in later

life, whereas the Fourth age represents considerably cognitive losses and a high level of frailty [33].

The social sciences describe several theories of ageing concerned with activity engagement in later life and these theories are important in practice, working with elderly people. The activity theory expressed by Havighurst [35] states that to obtain successful ageing, people should maintain the activities and attitudes of middle age for as long as possible and that activity performance supports maintenance of life roles. The essence of this theory is that there is a positive relationship between activity performance and life satisfaction; the greater role loss the lower the life satisfaction [36].

5.3. Ageing and health promotion

Besides the aspects of development and improving services for elderly, increased attention is paid to the health promotion among old people. During past years several international organizations have worked on policy frameworks and recommendations based on this perspective and the terms healthy ageing or active ageing have become part of everyday language of health care professionals. WHO presented the Active Ageing-Policy Framework in 2002, where *active ageing* was defined as “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” [37]. This policy framework takes into account the determinants of active ageing: the culture and gender aspects, determinants related to health and social services system, related to personal factors and determinants related to the physical as well as social environments. The framework helps to shape the ageing policies at regional and national levels and to direct research on ageing as well as influence the practical application of policies at community level.

Healthy ageing project (2004- 2007, EC funded) came up with recommendations to the EU institutions and Member States in the context of EU, UN and WHO policies related to healthy ageing [38]. Within this project *healthy ageing* was defined as process of optimizing opportunities for physical, social and mental health to enable older people to take an active part in society without discrimination and to enjoy independent and good quality of life.

Also the concept of *successful aging* is known in gerontology. This is a multidimensional concept synthesizing the psychosocial approach and the biomedical approach. The psychosocial approach emphasizes the life- satisfaction, including self-concept, mood, vitality and degree to which desired goals have been achieved or

accommodated and helps to better understand the process of social adjustment to old age. The biomedical approach tends to define successful aging as the absence of disease or disability (and sometimes as longevity or related ideas such as compression of morbidity). The conceptual model posits three core criteria for successful aging, including ego-integrity, functional autonomy and social engagement. Successful aging is not only the consequence of individual actions and attitudes. Numerous contextual factors impinge upon the observed outcomes. Successful aging is socially patterned according to factors such as social class, neighbourhood character, societal expectations and institutional design. Characteristic of an European perspective is that successful aging implies an emphasis on health promotion and prevention at population level [39, 173- 181 pp.].

5.4. Functional health and everyday activities

With the continuing growth of the elderly population in modern societies, it has become a matter of increasing urgency to look for ways to maintain and improve the functioning of ageing people, to help them cope independently in the community and ultimately, to raise the quality of their lives. Research on ageing traditionally has been concerned with health but recently the concept of functional health has growing attention [40]. In the medical literature, the terms function and functional performance are often used to describe the ability of an individual to carry out various tasks of daily living. Measures based on indicators of functional ability, such as personal activities of daily living (P-ADL) and instrumental activities of daily living (I-ADL) scores, are widely used both as indicators of the functional health of elderly populations and population subgroups, and in clinical assessments [39, p.15].

The person's everyday life consists of engagement in many different tasks- we sleep, wash, cook, eat, care for child, work, study, play, talk, socialize, read, reflect, watch TV, listen to the radio, create, and engage in a wide range of other activities [41]. Each day we perform countless tasks that enable us to carry out activities of daily living. Historically, occupational therapists focus on a client's ability to perform daily tasks that are important to the individual [42], activities and participation. In occupational therapy everyday activities that are valued and meaningful to individuals or culture recently are defined as occupations: specifically self-care, productivity and leisure [43]. The ability to successfully perform the day-to-day activities expected from the person (depending on culture, age and gender) or having adequate recourses to accomplish everyday tasks is called *functional independence*. If there are restrictions or lack of ability to perform an

action or activity in the manner or within the range considered normal that results from impairment or failure of an individual to return to the pre-existing level of function is called *functional limitations*. Occupational therapists view function as the dynamic transactional relationship of persons, occupations and environments, and assumes an inseparability of contexts, temporal factors, and physical and psychological phenomena and label this relationship *occupational performance* [44]. Understanding what people do is important because occupations have both desirable and undesirable effects on the individuals undertaking them and the environment around them. Human “doing” can influence both individual and community health and well-being. To facilitate healthy and satisfying occupational behaviour, is necessary to understand those factors that influence “doing” [41].

The functional limitations can lead to disability and this could be described as multilevel process, known as „the disablement process” [45] and depends on the intersections of the individual’s capacity and behaviours, as well as the relative resources and demands of the social and physical environments. Functional limitations within Disablement Model, described by Verbrugge- Jette [45], which serves as frame of reference for research in the epidemiology of ageing and disability, are defined as restrictions or difficulty in the performance of generic tasks but disability refers to the inability to perform specific social roles in everyday life because of health or physical problems.

Currently the International Classification of Functioning, Disability and Health (ICF) is health model which recognise the importance of factors other than abilities and skills and identifies environmental and social dimensions as important ways to categorize what people do [1]. ICF belongs to the WHO family of classifications, and one of its goals is to provide a scientific basis for understanding and studying health and health-related states, outcomes and determinants. The health conditions as such are mainly classified in the International Classification of Diseases (ICD) [46] whereas the consequences associated with health conditions are classified in the ICF. Currently in Latvia, only the ICD-10 is in official use. The ICF has been translated to Latvian, there is professional interest, especially within rehabilitation, and the classification is currently used as an education tool. Specialists in health care, social care and education gradually become familiar with ICF, but still it is not in practical use widely. The ICF can be used to code the wide range of information about health (e.g. diagnosis, functioning, disability, reasons for contacts with health services); it focuses on components that constitute health rather than the consequences or impact of disease. The ICF considers that the different elements

within the classification can interact to a lesser or greater degree, rather than having causal or hierarchical effect (Figure 3.).

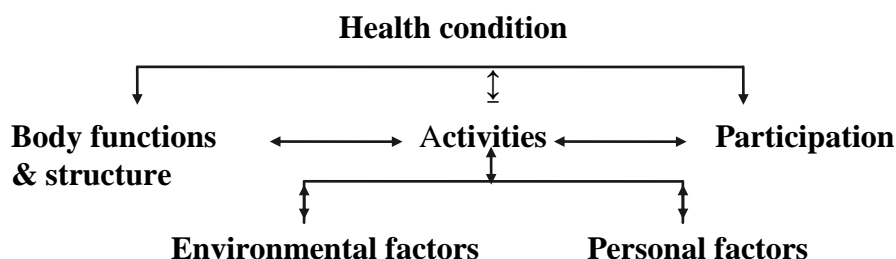


Figure 3. Interaction of ICF concepts (WHO, 2002).

The main components of the ICF are body functions and structures, activity, participation and the personal and environmental contextual factors. Each component can be described in a positive or negative way- functioning is umbrella term to describe the positive aspects of all mentioned components; but impairments describe the problems in body function or structure, activity limitations describe difficulties an individual may have in executing activities and participation restrictions describe problems an individual may experience an involvement in life situations. The environmental factors can be described in terms of potential facilitators or barriers for the person's activity or participation [31].

As the ICF considers not just the person and the disease but also the environmental context in which people live, it fits easily with occupational therapy thinking of the person-environment- occupation interaction described in models of occupational performance [47]. It is important to note that the ICF is about all people, not only persons with disabilities and respectively can be applied as theoretical base to describe the contexts which have impact on healthy ageing and quality of life for elderly.

5.5. Environment and old people

Supporting the assumption that function is the dynamic transaction of persons, occupations and environments we consider that as people grow older, when it comes to managing daily activities, they become more dependent on their physical and social surroundings. The environmental impact on ageing is the research focus within environmental gerontology [48]. Historically, the most important model to describe the person- environment (P- E) interaction is the Ecological Model of Ageing described by Lawton& Nahemow in 1973, including the docility hypothesis [49- 51]. In this model the person is defined in terms of a set of competencies and the environment is defined on the basis of its demands, named environmental press. Competence is defined globally by relatively stable capacities of biological health, sensory and motor skills and cognitive functions that could exhibit marked changes in varying trajectories of illness and health. The capacities possess a functional value for the individual when dealing with demands posed by tasks of everyday life. Environmental press as well as competencies may fluctuate over time and the successful interplay between those components results in an „adaptation level”. The docility hypothesis states that persons with lower competence are much more sensitive to the demands of the environment than persons with higher competence. In the process of revision this model, Lawton derived the „environmental proactivity” hypothesis which states that as competence increases, a greater proportion of environmental resources become available with which person may interact. Both environmental docility and environmental proactivity may lead to psychological well-being and enhance competence. The environment itself is complex and includes environmental classes, objective/subjective dimensions and attributes [51]. There are additional models in environmental gerontology describing the P-E interaction, like Congruence Model of Ageing by Carp and Priority Model of P-E Fit by Kahana [52- 54].

The most important for old people is the home environment and neighbourhood, which may affect participation in everyday life and independence, as confirmed by several studies in Sweden [33, 55- 56]. Some elderly, especially if they are disabled, become more homebound and home becomes the major “life arena”. For old people also the geographical location is important because the differences among rural, suburban and urban settings could be determined by housing planning, design and support system. Some studies show that old people living in the rural area seemed to have greater problems in their performance of ADL but people living in the inner city are more active than people living in the suburb [56].

According to gerontologist Rowles, the home environment is more than the physical and social setting, it may be seen as “a component of self”, a part of a person’s life linked to self- identity [57]. The perception of meaning of home may change as elderly persons experience increased frailty or disabilities. An increased dependency on others could lead to a feeling of loss of control and hereby threaten the feeling of home as a place of security and identity. Some studies found that among disabled elderly persons, home is perhaps the only substantial remaining symbol of independence and autonomy [56].

Housing is not only the conjunction of the dwelling, the immediate outdoor environment and the community, but is also a process of an ongoing exchange between the individual and his/her objective and perceived immediate socio-physical setting [58]. As suggested in the literature, the socio-physical environment of the home covers both objective and measurable characteristics, as well as hard to observe perceived elements in need of in depth exploration or other ways of approaching subjective world spheres [59]. One objective aspect of housing is housing standard, i.e. physical qualities such as heating, electricity and number of rooms. Other objective aspects can be described in terms of physical environmental barriers and accessibility [60, 61]. Accessibility is defined and operationalized as the relationship between a person’s functional capacity and the prevalence of physical environmental barriers in the home environment. According to this definition, accessibility is an aspect of person- environment fit (P-E fit) [62]. Perceived housing includes aspects such as housing satisfaction, usability, meaning of home, and housing-related control beliefs [63- 65]. Traditionally in research, housing satisfaction has been captured by means of attitudinal single-item evaluation (10). Usability is defined based on person- environment- occupation (P-E-O) transactions [66- 68] and indicates the extent to which individual housing needs and preferences can be fulfilled in terms of activity performance at home. Another aspect of person-environment interaction is meaning of home, i.e. the perceived relationship between the objective socio-physical environment and subjective evaluations, goals, values, emotions and potential behaviors that people pursue [58]. Finally, housing- related control beliefs, reflect psychological control theory recently applied to the housing, explain events at home either as contingent upon one’s own behavior, or upon luck, chance, fate or powerful others [69].

An important goal in health promotion is to create environments supporting healthy living and subjective well-being. Following a line of thought proceeding from the fact that independence in ADL is an important health indicator, a physical home environment supporting daily activity independence is most likely health promotive [60]. Based on the

Ecological Model of Ageing there is reason to assume that the relation between housing and health should be particularly strong in later life because of the increased vulnerability of older adults to environmental challenges [58]. In Latvia there were no studies on home environment- the meaning and impact on everyday activities performance among old people, but it would be necessary in light of changes in social care policy which tend to support the stay of old people at home as long as possible.

6. Material and methods

6.1. The ENABLE-AGE Project

This thesis is based on data from the project “Enabling Autonomy, Participation, and Well-Being in Old Age: The Home Environment as a Determinant for Healthy Ageing” (ENABLE-AGE, 2002-2004, EC funded). The ENABLE-AGE Project was a cross-national, inter-disciplinary research project with the main aim to examine the home environment as a determinant for autonomy, participation and well-being among very old people living alone in the community in five European countries: Sweden, Germany, United Kingdom, Hungary and Latvia. Given the lack of knowledge in the research field targeted, the approach of the ENABLE-AGE Project was explicitly explorative. The project consisted of three different parts: the survey study, the in-depth study and the update review [70]. This thesis is based on Latvian data from the in-depth study as well as survey study data from all countries.

The ENABLE- AGE Survey study was based on a comprehensive, project- specific questionnaire, administered at home visits with each participant by means of interview and observational assessments. Applying a follow-up design approach, the questionnaire was first administered during two home visits with each participant (T1), with a follow up (T2) conducted with a modified and shortened version of the questionnaire one year later. The ENABLE-AGE In-depth Study was accomplished after T1. In each country, a 10% sub-sample was identified for in-depth interviews, accomplished applying a qualitative design driven by a Grounded theory framework [71]. The ENABLE-AGE Update Review started with detailed documentation of building norms and guidelines in each county, necessary for the methodology key policy topics, which were compiled into a policy topics list at cross-national level, and concluded with a critical analysis of current policies and housing trends.

Based on the explorative character of the project as well as challenges related to the possibilities to recruit participants in different national contexts, the ENABLE-AGE sampling strategy did not aim for national representativity. For each country, the target sample was 400 very old single-living persons in geographically defined urban areas, stratified for gender (75% women, 25% men). Geographically, participants were located in the central part of Latvia (Riga and Jurmala), in south-western Germany (Heidelberg and Mannheim), in Hungary (Budapest), in south Sweden (Halmstad, Helsingborg, Lund) and in the district of North West England of the United Kingdom (Wirral, located in

Merseyside). Due to mean age and life expectancy differences between West/Central and East European countries, in Germany, Sweden and UK the participants were aged 80-89 years, while the corresponding age groups in Latvia and Hungary were 75-84 years. Number of participants in each country and each age group represented in Table 1.

Table 1. Participants of ENABLE AGE project.

Age (at T1)	Gender	Sweden	Germany	United Kingdom	Hungary	Latvia	Total
75-79 years old	Women	---	---	---	145	176	378
	Men	---	---	---	36	21	
80-84 years old	Women	147	165	169	171	92	974
	Men	53	47	76	40	14	
85-89 years old	Women	149	188	94	---	---	566
	Men	48	50	37	---	---	
Total N(T1)		397	450	376	392	303	1918

The initial ambition was to draw participants at random from official national registers, but this was only possible in Germany, Hungary and Sweden. The sampling list, dropout questionnaire and interview plan was used for documentation of this process (See in appendices 1-3). The interviewers sent out information letters to the potential participants according to plan, followed-up by a phone call after 4-5 days with the purpose to make sure that the intended participant fulfilled the inclusion criteria, that the person had understood the information, and to ask whether the person consented to participate. If the person agreed, an appointment for the first home-visit was made. Data were collected by project-specifically trained interviewers at home visits in the participants' home.

6.2. The ENABLE-AGE Project in Latvia

The Latvian ENABLE-AGE Survey Study sample was recruited in the urban districts Riga and Jurmala (Figure 4).

According to Latvian legislation on protection of personal data, it was impossible to receive random addresses from the Population register as originally planned. Substantial efforts were invested in finding alternative strategies for recruiting a valid sample. Thus, the sampling strategy was changed to create the sample indirectly by gathering the information of the target population through public organisations, pensioners' unions and social services. Contacts with municipalities and pensioners' unions in Riga and Jurmala were established. For example, rendering general dissemination effects as well, the Latvian

team took part in the regular meetings of five different pensioners' unions to inform their members about the importance and procedures of the ENABLE-AGE Survey Study, striving for a positive influence on the willingness among them to enrol with the project.



Figure 4. The districts of the ENABLE-AGE Survey Study in Latvia.

The sample generation process was gradual and ended with a list of 1,815 potential participants. Following the project specific sampling procedures, the final T1 sample in Latvia consisted of 303 respondents, 197 persons in the younger age-group (75-79 years) and 106 persons in the older (80-84 years) (Figure 5).

The ENABLE-AGE national project team in Latvia included staff of the Academic School of Occupational Therapy, Riga Stradiņš University, and qualified occupational therapists. The author of this thesis served as the national project leader, including active participation in the entire project process. That is, co-ordination of the sampling procedure, instrument translation and testing, organisation and co-ordination of the data collection process in all phases of the project, as well as overall project management including documentation and quality assurance of the entire process, participation in consortium meetings involving researchers from all the project partners.

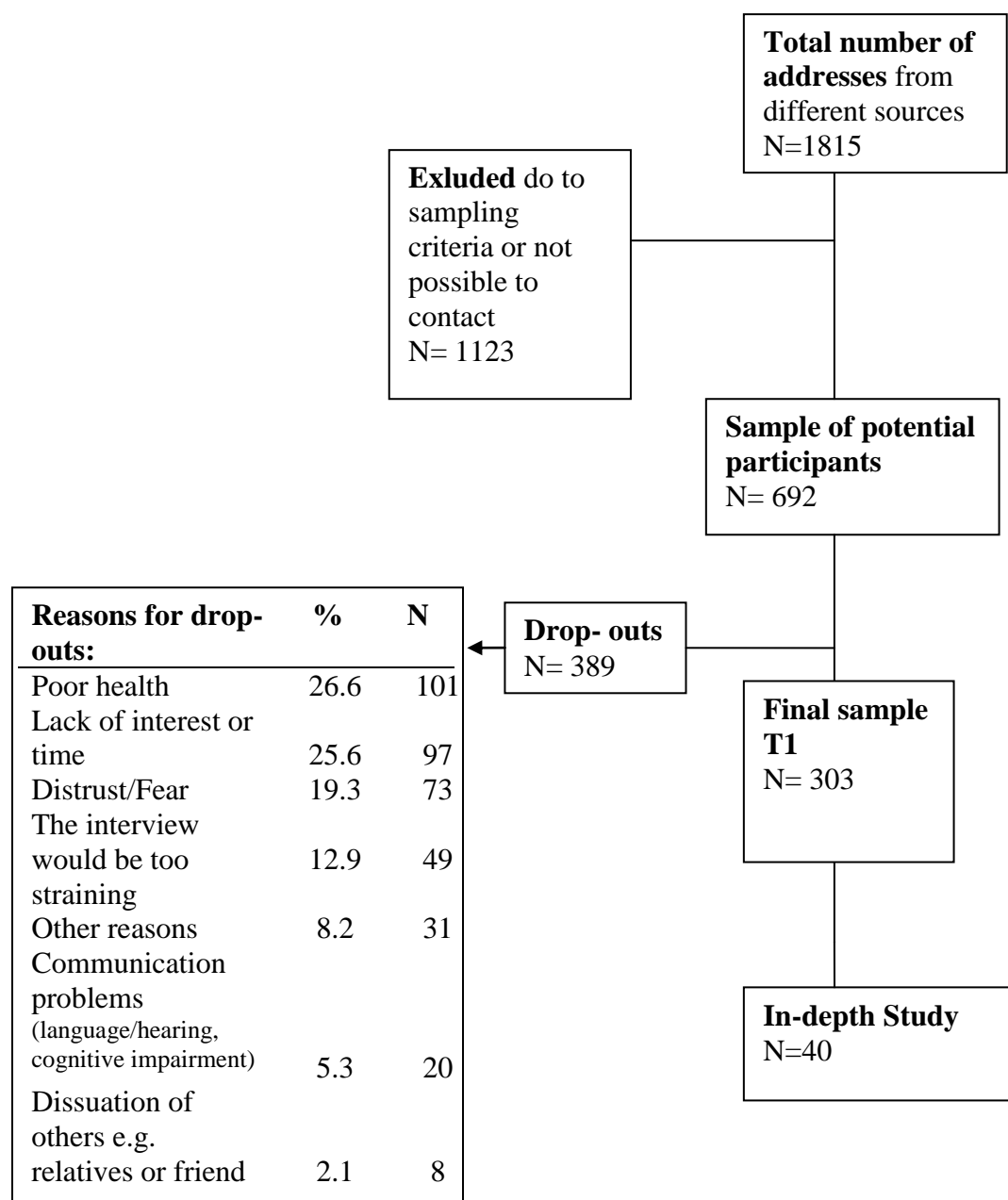


Figure 5. Description of the Latvian ENABLE-AGE sample generation, Survey Study T1 and In- depth Study.

6.3. Thesis overview

This thesis is based on three studies done during period from 2005 to 2008. Studies present results from data analysis of the Latvian part of the ENABLE-AGE In-depth (Study I) and from T1 of the ENABLE-AGE Survey (Study II and Study III). An overview of the studies building up the thesis is presented in Table 2.

The methodological development, data gathering procedures and analysis accordingly to each data source described below. The combination of quantitative and qualitative designs gives advantages because the different methods have complementary strengths and weaknesses, and such combinations can strengthen our knowledge on a general as well as an individual level [72].

Table 2. Thesis overview.

Thesis	Relation to ENABLE-AGE Project	Sample	Data collection	Data analysis
Study I	In-depth Study (2003- 2004)	N= 40 (Latvia)	In-depth interview, inspired by a Grounded Theory approach.	Content analysis.
Study II	Survey Study T1 (2002- 2003)	N= 1918 (Sweden, Germany, the United Kingdom, Hungary, Latvia)	Structured interview questionnaire, including observational assessments: “The ENABLE- AGE Survey Study Questionnaire”.	Descriptive statistics, F-tests, canonical correlations.
Study III	Survey Study T1 (2002- 2003)	N=1150 (Sweden, Germany, Latvia)	Structured interview questionnaire, including observational assessments: “The ENABLE- AGE Survey Study Questionnaire”.	Descriptive statistics, Kruskal- Wallis test, Mann- Whitney test, χ^2 - test, regression models.

6.4. The ENABLE-AGE In-depth Study (Study I)

6.4.1. Methodological development and training

The five national ENABLE-AGE teams varied in terms of their experience in qualitative research, disciplinary backgrounds and gender diversity. The research team in the Latvia comprised five researchers (only females), disciplinary backgrounds were in occupational therapy (educators and clinicians) and medicine and all were without experience of qualitative data collection and analysis. There were implemented a training programme for all teams, led by a senior scientist from the UK, experienced in qualitative research; to ensure that the qualitative research was conducted using the same principles in each country. Training sessions covered the basic principles of the naturalistic paradigm, epistemological issues and the grounded theory framework. Practical sessions were designed to explore the use of interviews, interviewing skills and ethical considerations when working with older participants in qualitative studies. Data analysis training was covered using real data from a past study. There also were designed pilot study for the project and in Latvia it enabled the interviewers to gain experience of interviewing and to test the methodology, process, scope and content of research questions to be used in the main qualitative study. Five older persons that were not part of the ENABLE-AGE project sample participated in that pilot study.

6.4.2. Sample

The Latvian ENABLE-AGE Survey Study database was used for sampling in order to identify potential participants representing diversity. The interviews were carried out with 40 participants: 6 men and 16 women in age group from 75-79 years and 4 men and 14 women in age group from 80- 84 years (Table 3, detailed description of participants see in Appendix 4).

Table 3. Participants of Latvian ENABLE-AGE In-depth Study, N=40.

Age	Men	Women	Total
Younger group	6 (2 repeat)	16 (2 repeat)	22 (4 repeat)
Older group	4 (2 repeat)	14 (2 repeat)	18 (4 repeat)
Total	10 (4 repeat)	30 (4 repeat)	40 (8 repeat)

The sampling diversity criteria ensured that there was a range of participants from good to poor health, the functioning based on evaluation of independence in ADL varied from independent to dependent in most of ADL, living in a variety of housing conditions and whose participation in social and community life varied from active to reclusive. In Latvia 7 participants rated their health as very good or good, while 33 participants rated it as fair or poor. 20 participants were independent in ADL, 16 participants were dependent in I-ADL, and 4 participants were dependent in both personal P-ADL and I-ADL. About 47.5% of the Latvian participants participated in social activities such as an organization or the like, while the other half did not. There was also variation among participants in terms of accessibility problems in their homes. All participants lived in ordinary housing; the majority of them lived in apartments, although the sample also included a few participants living in single-family houses. The period they had lived in their present housing ranged from 2 to 80 years ($m = 26$ y). Most of participants were Latvians but also included five Russian speaking participants, reflecting the ethnic diversity in the research district. Additional attention was paid to the inclusion of participants who came from economically varied backgrounds to ensure that both well-off and relatively poor older people were included.

The sample developed as the data gathering progressed, in order for ongoing attention to be paid to diversity criteria whilst including rich participant detail. Regular team meeting discussions assisted the sampling process until full data was obtained. Moreover, the 8 consultation interviews were completed (Table 3.), selection for the repeated interviews was based on whether the participants articulated in key areas for the project where other participants had been unable to fully expand or provide a valuable information because of their specific personal, social and/or housing situations.

6.4.3. Interview schedule and themes

The research design focussed on ageing, housing/home, accessibility and usability, health, well-being, autonomy, participation (social and community), social networks/support and quality of life, as they were major key concepts for the ENABLE-AGE project. These concepts were investigated from the older person's perspectives; interviews were semi-structured using an interview schedule that acted as a guide to facilitate purposive discussion between researcher and participant.

The development of the interview schedule began with pilot studies in each country organised around the key research questions. Findings from the pilot studies were

discussed first by each national team and then in a joint discussion of all five national teams and issues were grouped under the research questions. Interview schedule questions were simply used as a guide to facilitate discussion in the interviews and a prompt for interviewers when moving on through the interview. Each participant had freedom to talk about their own experiences of home and healthy ageing in ways that were relevant to them. This meant that the interview schedule was not used prescriptively and that each participant did not necessarily address all topics on the interview schedule as well as to allow new and important topics to emerge. Furthermore, the interview schedule was amended as the data collection and ongoing analysis progressed. The consultation interview schedule was designed to build on theoretical questions deriving from the grounded theory analysis as well as enabling clarification, elaboration, interpretation and/or extension of the qualitative data set. Major areas investigated in the consultation interviews in Latvia were: personal philosophies and strategies in different life situations, independence and the meaning of activities, reflections on health and home, as well as subjective views on social policy recommendations.

6.4.4. Procedure

During the first ENABLE-AGE Survey (T1) data collection, potential participants had signalled their interest and agreement to participate in the in-depth study. However, many of potential participants for the in-depth study changed their mind or were occupied with other activities and this impacted on the interviewing timetable in Latvia as well as fact that interviewers were involved in T2 data collection. Interviews were performed during a one-year time period from July 2003 till July 2004. A team of five interviewers accomplished the interviews. The number of performed interviews varied among the team members. The interview procedure began with the interviewer reading the T1 survey data and making notes regarding any issues of interest that could be clarified in the in-depth interview. Each interviewer arranged the date and time of the interview over the telephone, in accordance with each participant's preferences; interviews were conducted at home visits. In order to ensure that participants felt comfortable, carers could be present during the interviews, however this happened very infrequently.

All 40 interviews were taprecorded to ensure a good quality of the interview data. Participants were given time to get used to the tape recorder, it was very important in Latvia. Interviews were between half of hour and two hours in duration and often a break was taken during the interview. Many participants said they had enjoyed the interview,

some reported that it had made them think about some interesting aspects of their lives and they had learned something about themselves and/or their situation, others commented on their enjoyment in indulging in a stimulating or challenging discussion, as a rarity in their current lives. Researchers wrote in-depth field notes after each interview, structured by a field notes template. Field notes were used to document the researcher's interpretations of the background/context of the interview, the key points revealed in the interview in relation to research questions, initial ideas for analytical themes and any relationships between themes, the general tone of the interview and a reflexive analysis.

6.4.5. Data analysis within Study I

Twenty interviews out of 40 were transcribed along the interview procedure and close to the interview occasion. The remaining 20 interviews were analysed by repetitive listening and detailed description. The analysis was an iterative process and was based on team approach, with regular meetings and discussions. The tapes were listened several times, and the verbatim typed interviews were analysed using line by line coding followed by focused coding [71]. This was a selective phase aiming at synthesising data through constant comparison of raw data and emerging categories [71, 73].

Everyday activities were not an explicit part of the ENABLE-AGE key concepts, but the first round of data analysis showed that participants mentioned the significance of activities and talked about them as medium to structure the day and as an indicator of health condition as well as for independence and well-being. In order to narrow the analysis the author of this thesis went into the data again and made a content analyse [74] focusing on everyday activity performance.

6.5. The ENABLE-AGE Survey Study (Studies II and III)

6.5.1. Methodological development and training

The first phase of methodological development was a revision and adaptation of the accessibility assessment instrument for cross-national use [75]. All instruments and questions were translated into five languages (English, Latvian, German, Hungarian and Swedish) corresponding to standart procedures, followed by piloting in all countries. Parts of assessment instruments were translated also into Russian, due to the specific cultural situation in Latvia. Three day interviewer training courses led by the researchers responsible for the respective instruments followed in each country to lay the ground for reliable administration. After completed training courses, pre-tests were administered

where older people, not included in ENABLE-AGE sample, participated followed by necessary optimisation and revision of the ENABLE-AGE Survey Study Questionnaire. Based on the pre-testing results, the ENABLE-AGE Consortium reached consensus and agreed upon the final format of the survey instrumentation [70]. Finally, an inter-rater reliability study of the accessibility instrument was accomplished, based on a total of 64 pair-wise assessments. The results demonstrated moderate to good agreement across the research sites [75].

6.5.2. Sample

In all, the sample (Study II) comprised 1918 very old adults; 75-89 years old (Table 4.). As shown in Table 4, differences in finances (income and evaluation) existed among the five countries, with lower income in the Eastern compared to the Western sites, while differences in education were minor. Although there were differences in subjective health and duration of living, this nevertheless was a relatively frail sample of very old adults who on average had lived in their current homes over a long time period.

Based on data from three countries (in Latvia 303 persons, Germany 450 persons, Sweden 397 persons) the sample for Study III was 1150 very old people and participants were divided in two groups, based on ADL dependence. The ADL independent group include persons with no difficulties perform ADL (502 persons total; in Latvia- 202 persons, Germany- 149 persons, Sweden- 151 persons) but ADL dependent group include persons dependent both in I-ADL and P-ADL (596 persons total; in Latvia- 90 persons, Germany- 270 persons, Sweden- 236 persons).

6.5.3. Instruments

The comprehensive ENABLE-AGE Survey Study Questionnaire [70] incorporated a wide range of well-proven self-report scales and observational formats along with project-specific questions on housing and health. Data, analysed in Study II and Study III, comprises only part of the whole instrument set, overview of them presented in Figure 5 and examples included in Appendix 5.

Global self-ratings of perceived health were collected by means of the well-established question “In general would you say your health is?” from the SF-36 questionnaire, rated on a scale with five response alternatives, ranging from “excellent” to

“poor” [76]. In this study, perceived health was coded such that higher values indicated better health (Appendix 5, p. 90).

Table 4. Description of the ENABLE-AGE sample (all countries)

Variable	Sweden	Germany	UK	Hungary	Latvia
Number of participants (Total $N = 1918$)	397	450	376	392	303
Age range (years)	1912–22	1912–22	1912–22	1917–27	1917–27
Age (years)	80–89	80–89	80–89	75–84	75–84
Age (M , SD)	84.6 (3.1)	85.1 (3.2)	84.8 (2.7)	80.7 (2.9)	79.4 (2.6)
Gender (% women)	74.6	78.4	70.0	80.6	88.5
Education: years of schooling (M , SD)	8.8 (2.2)	11.6 (2.6)	9.9 (1.9)	9.7 (3.0)	11.3 (3.4)
Income/month in € (M , SD) ^a	1,015 (410)	1,569 (799)	1,044 (527)	216 (99)	100 (37)
Evaluation of financial resources (% , n):					
Low	34.4 (130)	17.4 (76)	23.4 (86)	56.5 (218)	87.9 (262)
Average	54.5 (206)	73.3 (321)	65.5 (241)	39.9 (154)	12.1 (36)
High	11.1 (42)	9.4 (41)	11.1 (41)	3.6 (14)	0.0 (0)
General perceived health (1–5) ^b	2.8 (1.1)	3.6 (0.8)	3.0 (1.0)	3.5 (1.0)	4.2 (0.7)
Number of diseases (0–44) ^c	4.9 (2.9)	5.3 (3.0)	4.2 (2.7)	6.1 (3.9)	7.9 (3.4)
Number of symptoms (0–30) ^c	7.3 (4.3)	8.0 (4.5)	8.1 (4.9)	10.7 (6.6)	13.8 (5.3)
Duration of living in same apartment or house: years (M , SD)	21.8 (17.4)	33.5 (19.4)	25.0 (18.3)	33.9 (19.2)	24.7 (16.6)

Notes: SD = standard deviation.

^aIn total, 269 participants (14%) refused to give information on income per month.

^bSubjective evaluation; higher scores indicate lower subjective health.

^cHigher scores indicate more reported diseases or symptoms.

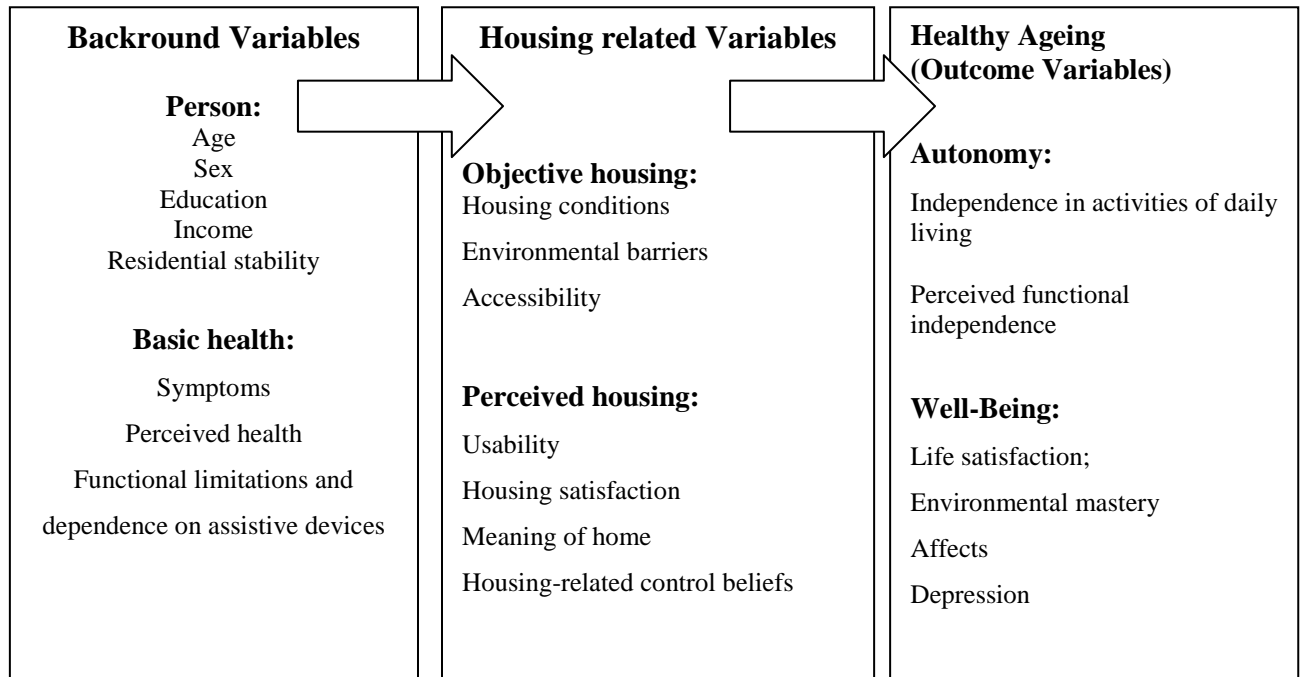


Figure 5. Overview of data for analysis within Studies II and III.

Independence in activities of daily living (ADL) was assessed using the ADL Staircase [5], comprising five personal activities of daily living (P-ADL) items (i.e. feeding, transferring, going to the toilet, dressing, and bathing) and four instrumental ADL (I-ADL) items (i.e. cooking, shopping, cleaning, and transportation). The ADL Staircase is administered using a combination of interview and observation, and the assessment is recorded on a three-graded scale: independent, partly dependent, and dependent (Appendix 5, pp. 105-107). Dependence is defined in terms of assistance from another person. Following the instrument manual, responses were dichotomized into independent/dependent.

Perceived functional independence was assessed by a single item self evaluation measure adapted from the Neuropsychological Aging Inventory (NAI) [77] (Appendix 5, p. 108).

Psychological well-being comprises cognitive and emotional aspects. Cognitive aspects were operationalised as perceived life satisfaction and perceived environmental mastery, while emotional aspects were operationalised as affect and depression.

Life satisfaction was assessed by means of a single question where the participants were asked to judge to what extent they personally were satisfied with their life on an 11-point scale from 0 = 'not at all' to 10 = 'very much' (Appendix 5, p. 108).

Environmental mastery was assessed by one subscale of the Psychological Well-being Questionnaire [78]. The environmental mastery subscale addresses sense of mastery and competence in managing the environment. These constructs were assessed by subjective agreement or disagreement to statements, applying a five-point scale ranging from 1 = 'strongly disagree' to 5 = 'strongly agree' (Appendix 5, pp. 108- 109).

Affects were assessed by means of the Positive and Negative Affect Schedule (PANAS) [79], allowing to obtain a score for negative and positive affects, consistently shown as independent dimensions (Appendix 5, p. 88).

Depression and depressive symptoms were assessed with the short version of the Geriatric Depression Scale (GDS, 15 items) [80]. Participants were instructed to judge with 'yes' or 'no' how they felt over the past week (Appendix 5, p. 91).

Objective Aspects of Housing covered housing standards, number of physical barriers and magnitude of accessibility problems. Housing standard was expressed by information about number of rooms in the dwelling. Number of physical environmental barriers in the home and magnitude of accessibility problems, were assessed by means of the Housing Enabler [81]. For the ENABLE-AGE Project, a cross-national, reliable research version was developed [75] and the instrument was administered in three steps: assessment of functional limitations, assessment of physical barriers and calculation of assessment score. *The first step* is a combination of interview and observation, dichotomously assessing functional limitations (13 items) and dependence on mobility devices (two items), i.e. the personal component of the concept of accessibility (Appendix 5, p. 110). In this study, part of the data collected in this step was used as a sample characteristic variable; a sum-score labelled "no. of functional limitations". *The second step* is an assessment of physical environmental barriers, i.e. the environmental component of accessibility. This is based on a detailed observation assessing environmental barriers in the home and the immediate outdoor environment (188 items) as present or absent (Appendix 5, pp. 92- 104). Data from these assessments were used as a sum-score variable labelled "no. of environmental barriers". *The third step* is the calculation of an accessibility score: For each environmental barrier item, the instrument comprises predefined severity ratings, i.e. points quantifying the magnitude of accessibility problems predicted to arise in each case. The severity scale is scored 1 to 4; higher points indicate more problems. On the

basis of the assessments accomplished in steps 1 and 2, using special software [82] the profile of functional limitations and dependence of mobility devices identified in each person is juxtaposed with the environmental barriers found present. The sum of all the predefined points yields a score quantifying the magnitude of accessibility problems; higher scores mean more problems. In the current study, this total score was used as a variable labelled “accessibility problems”.

Perceived Aspects of Housing represented by four domains, as suggested in literature [65]. *Housing satisfaction* was assessed by means of a single question ("Are you happy with the condition of your home?") adapted from the Housing Option for Older People (HOOP) [83], estimating housing satisfaction using a 5-graded rating scale ranging from 1 (definitely not satisfied) to 5 (yes, definitively satisfied) (Appendix 5, p. 113). *Usability* was assessed by means of the self-administered Usability in My Home questionnaire (UIMH) [67, 84], consisting of 16 items to be rated on a 5-graded scale, from 1 (not at all) to 5 (fully agree), targeting “activity aspects”, “personal and social aspects”, and “physical environmental aspects” (Appendix 5, pp. 111- 113). Due to low internal consistency in the ENABLE- AGE dataset, the six items in “personal and social aspects” were excluded and only sub-scales “physical environmental aspects” (6 items) and “activity aspects” (4 items) were retained for analysis. *Meaning of home* was assessed with the Meaning of Home Questionnaire (MOH), a self-assessment questionnaire developed to capture older persons’ subjective meanings [65]. The 28-item questionnaire captures four different aspects of meaning of home: “physical” (7 items), “activity” (6 items), “cognitive/emotional” (10 items) and “social” (5 items). Each item is to be judged on an 11-grade scale ranging from 0 (strongly disagree) to 10 (strongly agree) (Appendix 5, pp. 89- 90). Since the items of each aspect purposefully were developed to represent a wide range of meaning related to the home, internal consistency was limited [65]. *Housing-related control beliefs* were assessed with the Housing-related Control Beliefs Questionnaire (HCQ) [69]. This 24-item questionnaire was based on the psychological dimensions of “internal control” (8 items), “external control: powerful others” (8 items), and “external control: chance” (8 items). Each item is assessed in terms of agreement to a statement using a 5-graded scale, ranging from 0 (not at all) to 5 (very much) (Appendix 5, pp. 114- 115). "Internal control" means that housing-related events are highly contingent upon a person’s own behaviour, where personal responsibility implies that one is responsible for what happens. "External control" means either that some other person is responsible or that things happen by mere luck, chance, or fate. Psychometric analyses of the ENABLE-AGE dataset indicated low internal

consistency as concerned “internal control”, while each of two dimensions of “external control” reached medium level. Thus, the dimension of “internal control” was excluded and the two dimensions of external control were combined to a 16-item scale for analyze [65].

6.5.4. Procedure

Data collection was accomplished at home visits. Since the data collection was very extensive, each participant was visited twice, with only a few days in between the visits. In cases where it was appropriate to the respondent, the data collectors carried out both T1 visits during one session. Regular team meetings were necessary to maintain the data quality, discuss problematic situations during the data collection and the author of thesis coordinate this work.

In Latvia the data collection for the T1 survey started in November 2002 and was completed during May 2003. The duration of the T1 survey interview at home: visit 1 was between one and a half and two hours, and at home visit 2 one to one and a half hour. In 160 cases, where it was appropriate for the respondent, the data collectors carried out both T1 visits during one session.

6.5.5. Data analysis within Study II

For presenting the material, descriptive statistics were used. The differences between national samples in mean scores were tested by means of F-tests. To acknowledge the large sample, the level of statistical significance was set to $p < .001$.

In order to explore patterns of relationships between aspects of housing and healthy ageing canonical correlations were used, which is the most appropriate technique for exploring relationships among multivariate combinations of variables [85]. Canonical correlations parsimoniously describe the number and nature of mutually independent relationships existing between two sets of variables which in this study was the housing variable set and the healthy ageing variable set. The housing variable set consisted of sum scores or scores on environmental barriers, accessibility, usability, meaning of home, housing-related external control, and housing satisfaction. The healthy aging variable set consisted of sum score or scores on ADL independence, perceived functional independence, life satisfaction, environmental mastery, depression, and positive as well as negative affect.

The analysis proceeded in a stepwise fashion as follows: First computed a pair of canonical variates such that the correlation between them is as large as possible. Next, calculated a second pair of canonical variates, orthogonal to the first, in the same fashion, and so on. The correlations between the pairs of canonical variates are called the canonical correlations (R). The procedure implies that the first R , extracted in the first step, is the largest; the second R is the second largest; and so on [85- 87].

To interpret the findings, there were focus on the variable loadings. A high loading indicates that the variable is part of the relational pattern expressed by the canonical correlations. There were not considered loadings equal to or below the cutoff value of $r = .35$ for interpretation [88]. In addition, were reported the standardized canonical coefficients.

The analysis was conducted for each research site separately. To check for similarity of the patterns of relationships found in the different national samples, Tucker's coefficient of congruence [89] was used to compare the national samples' loading patterns. The coefficient of congruence is similar to a correlation coefficient, also ranging from -1 to 1 ; it was originally designed to compare patterns of factor loadings derived from different samples and is applicable to canonical loadings as well, level of significance were chosen $p < 0.05$.

6.5.6. Data analysis within Study III

For presenting the material, descriptive statistics were used. For each of the two ADL groups, differences between the three countries were tested by means of the Kruskal-Wallis test for all variables except for sex where a χ^2 - test was used. Similarly, for the three countries differences between ADL groups were tested by the Mann- Whitney test except for sex where again a χ^2 - test was used.

In order to establish the influence on perceived health from the variables describing objective and perceived housing aspects, regression models were used. As the outcome variable is a polytomous ordered categorical variable, was used ordinal regression analysis that is suited to handle outcome variables with several ordered categories [90]; this regression method is an extension of logistic regression [91]. In ordinal regression models, the focus is on the cumulative probabilities of belonging to the various categories of the outcome variable. The so-called link function relates the cumulative probabilities to a linear combination of the predictor variables. Depending on the distribution of the categories of the outcome variable, different link functions are suitable. The categories of

perceived health were fairly evenly distributed; hence the logit function was appropriate as the link function. As the link function is a rather complicated function, the estimated regression coefficient is not easily interpretable. However, the direction of an effect can be seen from the sign of the coefficient. That is, a positive coefficient indicates that the probability of being in a higher category increases as the value of the predictor increases; while a negative coefficient indicates that the probability decreases as the value of the predictor increases. At first were analyzed univariate models, for each of the ADL groups in each of the three countries, containing perceived health and only one explanatory variable. Thereafter, for each ADL group separate multivariate regression models, studying the simultaneous influence of the objective and perceived aspects of housing were analyzed simultaneously for the three countries. One by one, were excluded in each country the aspect of housing that was the least significant in all countries, ending up with models only including variables that were significant in at least one of the countries. Thus as a result of the design, there was the same model for every country. Variables not included in these models thus do not add significant information about the perceived health in any of the three countries. When models were established they were later controlled for possible confounding from sex, age, and monthly income. P-values below 0.05 were considered statistically significant.

6.6. Ethical considerations

The ENABLE-AGE Project followed ethical principles for research on humans, and in each country involved the project was subjected to ethical review, followed by formal consent according to national regulations.

In Latvia, the ENABLE-AGE project process was subjected to review by the Ethics Committee at Riga Stradiņš University (2002) and approve as well certified at State Data Inspection for the storage of personal data. In order to achieve a general awareness among potential participants, press releases about the project were sent to national news agencies and a press conference at the Riga Stradiņš University was organized, resulting in newspaper article.

During the data collection, a substantial number of very old people were visited in their homes. Positive and proactive ethical approaches discussed and agreed upon at consortium level were adopted. Informed consent was gained from all interview participants and they were assured of their anonymity, as stated in oral as well as in written information. Participants were informed that they could withdraw from the interviews if

they wished, including a withdrawal of their data at any stage up to publication of results. The interviews could touch on sensitive issues, and in the interviewer training courses as well as during team meetings through the collection process of the data; the interviewers were trained in dealing with such issues and situations. Further, they were instructed to give advice at the end of the interview session if participants requested this. For very good reasons, we expected to come upon situations calling for social and medical interventions. Given their professional training, the interviewers were well equipped to offer participants in such situations the information needed in order to be able to contact local health and social service authorities for advice as concerned their personal situation. Each participant got an informative letter with participant number and the details of research group for communication.

7. Results

7.1. Meaning of everyday activity performance among very old people in Latvia (Study I)

Participants described everyday activities that they performed as well as the special value those activities have for them. These differed from person to person, which could be explained with the differences in personal characteristics, values, interests, living environment and past experience. From the interviews the main category “everyday activities by old people” and subcategories have been derived – activities supporting independence and autonomy, activities for health and well being and participation as well as factors affecting the performance (Figure 6).

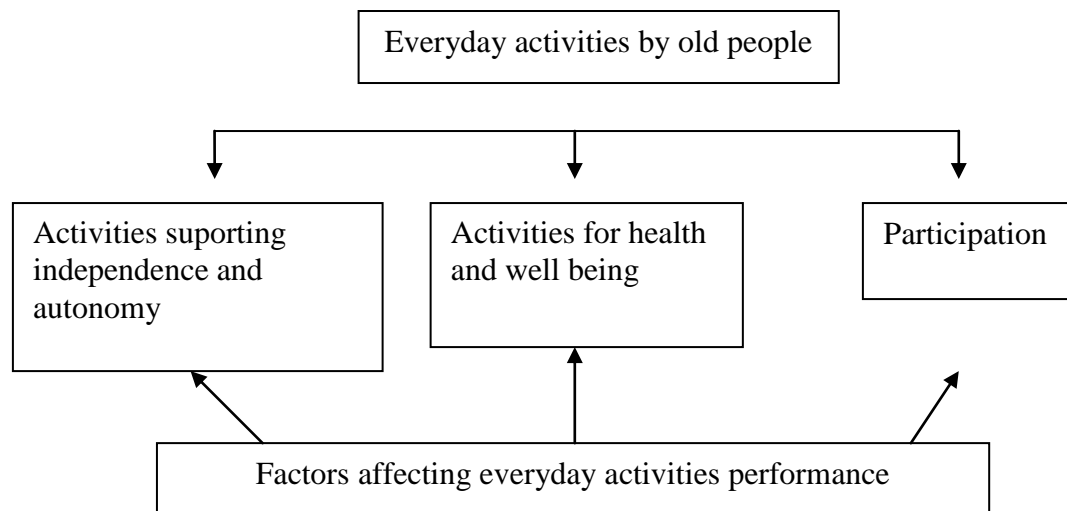


Figure 6. Main categories derived from data analysis from In-depth interviews.

Independence and autonomy

Most of the participants pointed out that their days are uniform and determined by the routines and habits that they have developed throughout life and adapted do to current health status. Such uniform daily routine though, signifies the ability of people to maintain independence and adapt to available energy level.

The self care activities were the basics of everyday life. Dressing, eating, washing- was described as activities necessary to do. Self care activities usually were performed on regular base and participants talked about them as routine witch developed during the life.

The participants noted that in line with the increasing difficulties in performing the activities, the independence in self care was increasingly considered to be a value. Almost this conclusion was based on former experience of caring other old person- parent, spouse or friend.

“I had that experience that my father had a stroke.....as he was sleeping on the bed, I though (...) and, you know, he couldn’t eat, I was feeding him – he could swallow, you know, that is difficult.”

Houseworks usually were performed on regular base as routine and the participants noted that, years passing, they have gradually decreased the performance of some physically straining housework activities, i.e. adapted the performance in accordance with their age and functional abilities. One of the women described changes during the years concerning cleaning:

“Well, twice a year I do such, general cleanings, when I clean my ceiling and walls and everything... It is by all means becoming more and more difficult... That doing becomes slower and less careful. Well, I can clean it like that. I clean everything on my knees now. I cannot anymore.”

Many participants noted that housework activities take much time and energy. The old people planed performance of those physically demanding activities or used help from others. There was a different perception of the help; especially in the situations where the participants had help from social care assistant there was strong critique concerning the quality of performed cleaning work and dissatisfaction or feeling of dependence. For all participants it was important to have the house cleaned in accordance with their own standards and, for example, woman with the mobility restrictions felt a discomfort because a caretaker had neither time nor possibility to clean the house in the way she would do that herself.

„On Fridays she cleans the floor so... (.) fast, so scarcely, not to raise the dust. Sometimes she does something if she sees that something is not right. But she has no time either! I am not to her only one.”

The difficulties to maintain the house in some extend were perceived as loss of autonomy. In some interviews the reduction of ability in caring of the home also interfered with the feeling of comfort at home. Participants would like to renew or decorate the dwelling. Many participants of the interviews with pride mentioned and stressed that they did repairs in the flat themselves earlier but now the desire to perform at least minor repairs is usually affected by the functional condition of a person as well as limited material resources:

"I get on my nervs that I need the renovation in my flat, I really don't remember how long time ago I did it, maybe 15 years ago. And while my daughter was ill and lie I cann't do anything. And also materials are expensive."

Shopping was also another activity were participants who needed assistance experienced loss of autonomy to some extend. The formal help from social care services were criticized because the helpers did not considered the choice, habits and financial considerations of the person, for example, they did not look for cheaper food. The informal help from friends, neighbours and especially relatives were perceived in more positive way.

Activities for health and well-being

Walking as well as shopping was most often performed activities outside home. Some participants strongly expressed that walking is very important activity for maintenance of health:

"I think I have to go, have to walk as much as possible, mustn't, so to say, sleep, oh... to preserve health(..). I think that movement is life!"

Depending from habits and environmental aspects the old people incorporated walking in daily life differently. Some participants told that possibility to be outside home, to be in nature gave them pleasure and were important for them. If movement limitations occurred then possibility to sit outside on the balcony or in the yard was mentioned.

Some of the participants told about performing house works as activities good for health because they are physically demanding and provide training for ageing body. Besides physical training other participants emphasized that the activities for the preservation of cognitive function, like solving crossword puzzles and rebuses, are necessary.

Helping others, older or disabled people, voluntary work was very important for some participants, but it was difficult to formulate wider perspectives on these. In a way this ability to help someone else, was a factor determining the feeling of well being of a person. Those who had experience of helping other people also were participants with higher subjective health evaluation.

"I think that if a person has been given such health then you have to kick it up. Because I cannot prove anything to myself anymore! Well, I just say, if I have to help someone, then.... to bring something, to buy medicine or something, I am very happy. If I still can make it!"

Handcrafts differed among woman and man and were described as habit for persons who use to do it during whole life. The majority of participants performing handcrafts stressed the significance of doing and wished to act in order to decrease idleness in their own life. Some of the participants stressed that they preferred to do handcraft with some kind of “productive result”, for example, instead only watching TV. Other participants revealed that handcrafts are source of pleasure especially if the end product was highly evaluated by others, for example a nice jumper or tidy, or if the actual doing absorb the person. Handcrafts also were the medium to have some extra money or save money even when those activities become more difficult to perform:

“So I have to construct the ladder. They cost 35 lats or something in the shop, well, there’s no use to give it away. Well, I have wood, I have iron, if I need to mend my spectacles, I can do that, too, those tiny works. If I need to patch pillowslip or blanket cover, I do it myself!”

Some participants mentioned gardening as important activity, almost everyone was very proud for the energy and work invested and stressed that the result is visible and useful. This activity involved the habitual aspect, gave pleasure and in some cases was necessary for survival as help to save money on ration.

The mentioned above activities - handcrafts and gardening as well as reading – could be also described as hobbies performed by old people. In interviews some participants mentioned other more specific activities performed as hobby- there were examples of different collections (stones, shells, paintings), playing music, drawing, bird watching and feeding, letter writing. All of them had constant place and meaning in the life of the person and performance of those activities were described as important for well being.

The participants expressed that the everyday activities took more and more energy and they become quickly tired and needed to rest. They revealed that they used to a larger extent performed physically passive and more intellectual activities like watching TV, listening to the radio, reading, solving crosswords to fulfil the time.

Participation

Activities like watching TV, listening to the radio, reading and solving crosswords also had informative aspect that is doing them gave connection to the world outside. Watching TV and listening radio also replaced the attendance to cultural events such as the theatre, concerts and exhibitions. Especially if the participants had poor vision, listening the radio seemed to be most important.

The participants mentioned that relationships with relatives are important. The visits and even regular phone calls were highly valued. Thoughts of their closest, beloved persons considerably affected the well being of the participants:

“You know, when there is peace, harmony, nothing will happen. It, my dear, affects, it affects so much, it affects the most, nothing affects like that...All my children are well and I am well. When I feel that they feel bad, I am dead.”

Those who had no relatives describe the relations with the friends or neighbours in the same way. The importance of continuity of the social contacts was visible; there was no strong interest to establish new contacts. Only one man told about wish and experience to find female friend because for him the loneliness was the most difficult and he considered living together with someone be of great importance:

“And I hope that I also could get some housewife... (.) who, I have to say, would like to live and wouldn't lose her spirit. And, then together, the life would be such, juicier and more pithy.”

Other participants explained their position concerning social contacts in relation to personal characteristics; for example, if they never had been interested in being together with other people they can better survive alone also in the old age.

The neighbours were often mentioned as one important social contact group in cases where those contacts were based on stability and good relationship. Other participants described how changes in social environment (old neighbours died or relocated, new neighbours moved in) affected them negatively. The neighbours also were providers of informal care in some cases.

Organizing informal meetings of friends had a significant role in the life of the elderly but was more characteristic for women. The men admitted that the group of friends gradually had broken up because of that friends had deceased. Habits e.g. smoking and abuse of alcohol among friends acted as a restraining factor for continuing contacts.

Only some participants noted that leisure activities organized in interest groups and professional organizations were of particular importance. Then the activities provided sense of belonging, being together and facilitated participation. Further, participation allowed them to break free from loneliness and routine and gave a sense of rhythm of mundane life. Mainly women, noted that their meaningful social activities are connected with the occasions organized by the church: services, occasions organized by the whole congregation, charity activities, etc. Interviews showed different ways how participants became members of religious organizations; this has to do either with religious upbringing in the family or the influence of the Soviet times, or turning to religion at old age only.

Participants, who were overwhelmed with loneliness and depressive mood, pointed out that they used to go outside the home every day, often, to visit supermarkets. It was viewed as an opportunity to be among people, to change the habitual environment. Some other participants expressed that even to go out they really needed purpose, for example going shopping, visiting the graveyard, visiting the doctor or some other person. Also taking care of animals, mostly cats, helped participants to feel necessary, to be occupied. Pets usually were described as family members and had constant place in the daily life of person because they decrease feeling of loneliness. Both women and men pointed out that important for them is taking care of the graves of spouses, relatives and friends, as well as observing the traditions, for example public commemoration days, commemorations on the day of the death of relatives, which were observed as a tradition since childhood, but gained more significance with time.

Factors affecting the performance

Many participants expressed that they wanted to engage in more activities than they do but that they were limited by their decreasing abilities and by the poor environmental support. Also the participants acknowledged that they cannot design their life, as they would like to because of the financially pressing conditions. Some participants of the interviews stressed that the repertoire and frequency of performing activities has decreased due to lack of financial resources. For example, the expenses of travel and treat were mentioned as well as expenses for regular phone conversation limited their possibilities to meet other people in nowadays. Also the lack of accessibility of the city and inter-city public transportation for people with functional limitations influenced other activities such as gardening or taking care of graves. Positively were perceived the possibility for people older than 80 years in Riga to use public transport without payment which facilitated those

important activities as well as visiting others. Activities outside home often had seasonal character, which was especially stressed by the participants who had mobility restrictions in winter.

Financial conditions impacted the way how people organised their everyday life, for example, in order to save money old people visited different shops and carefully followed the promotional news about discounts. Also habits played role, for example, to shop at market place where they use to do it instead the newly opened shops.

Participants who experienced the difficulties in performance of activities used adaptive strategies- change the environment, change the way of performing activity, for example gardening on balcony or windowsill instead of work in allotment. Different resources were used to maintain reading- for example visits to the library to borrow the books, exchange of newspapers between neighbours or relatives, and they served as a facilitating factor for participation.

7.2. Aspects of housing and healthy ageing in very old age in five European sub-samples (Study II)

On the descriptive level, participants in Eastern European samples (Latvia and Hungary) reported lower scores in life satisfaction and higher scores in depression compared with participants in Western European samples (Sweden, Germany, and the UK). Moreover, in Latvia (but not in Hungary) the environmental mastery sum score was low, which is in contrast to all other national samples. Latvian participants also scored highest in objective independence in ADLs compared with all other participants, and their perceived independence in daily living was lowest compared with all other participants (Table 5).

The canonical correlation analysis revealed two significant canonical correlations in all national samples and a third significant R only in Sweden, the UK, Hungary, and Latvia. The first canonical correlation in Sweden was $R = .74$ and accounted for 73% of the overall covariance between housing and healthy aging variables. In Germany the corresponding correlation coefficient was $R = .75$, accounting for 79% of the overall covariance; in the UK it was $R = .78$ (74%); in Hungary, $R = .78$ (72%); and in Latvia, $R = .80$ (68%). Loadings and standardized canonical coefficients are reported in Table 6.

Table 5. Basic description of healthy aging aspects in the five national samples.

Variable (<i>M, SD</i>)	Sweden N= 346	Germany N= 450	UK N= 350	Hungary N= 337	Latvia N= 267	Diff
Age (years)	80–89	80–89	80–89	75–84	75–84	
ADL independence (0–9) ^a	7.6 (1.6)	7.8 (1.4)	8.0 (1.5)	7.9 (1.5)	8.2 (1.5)	***
Perceived functional independence (0–10) ^a	8.5 (1.9)	8.1 (2.1)	8.0 (1.5)	8.0 (2.5)	7.3 (2.2)	***
Life satisfaction (0–10) ^b	8.5 (1.7)	8.5 (1.8)	8.2 (1.8)	6.6 (2.4)	5.5 (2.0)	***
Environmental mastery (1–5) ^c	4.0 (0.5)	4.4 (0.6)	3.9 (0.5)	4.0 (0.7)	3.2 (0.5)	***
Positive affect (1–5) ^d	3.2 (0.6)	3.4 (0.7)	3.4 (0.6)	3.4 (0.6)	3.1 (0.5)	***
Negative affect (1–5) ^d	2.1 (0.5)	2.0 (0.6)	2.0 (0.6)	2.1 (0.6)	2.5 (0.5)	***
Depression (0–15) ^e	3.0 (2.3)	3.2 (2.9)	3.0 (2.6)	5.5 (3.6)	6.4 (4.0)	***

Notes: ^aHigher scores indicate better ADL independence (ADL Staircase) or perceived functional independence (self-evaluation).

^bHigher scores indicate higher satisfaction with life (self-evaluation).

^cHigher scores indicate higher environmental mastery (Ryff scale).

^dHigher scores indicate stronger affect in this domain (Positive and Negative Affect Schedule).

^eHigher scores indicate more depressive symptoms (Geriatric Depression Scale).

*** $p < .001$.

The variables with the highest loadings, contributing mostly to the canonical variate in the housing variable set, are behavioral and physical aspects of the meaning of home, the magnitude of accessibility problems, external housing-related control beliefs, as well as activity aspects of usability in the home. Most of these variables correlate above .50 with the canonical variate in all national samples, except for physical aspects of meaning of home in Sweden and activity aspects of usability in Hungary. Moreover, the loadings of physical environmental aspects of usability reach the cutoff value of $r > .35$ in all samples. Additionally, loadings in cognitive–emotional and social aspects of meaning of home are particularly high in the Eastern but not in the Western European samples. In contrast, the number of environmental barriers and housing satisfaction do not load highly on their canonical variate and thus are not a part of this relational pattern. In terms of standardized canonical coefficients, however, we found relatively low scores for physical environmental aspects of usability as well as physical, cognitive–emotional, and social aspects of the meaning of home. This indicates some redundancy that is due to correlations of the variables within the housing set, meaning that these variables would not contribute substantially to the first canonical correlation, given the other variables in the set, particularly for the behavioral aspects of meaning and activity aspects of usability, at least in Sweden, Germany, and Latvia. Therefore, the first canonical variate in the housing variable set can mainly be characterized by behavioral aspects of the meaning of home, the

magnitude of accessibility problems, and low housing-related external control beliefs in all national samples.

In the healthy aging variable set, independence in ADLs and perceived functional independence in daily activities, as well as subjective well-being in terms of environmental mastery and depressive symptoms, load most highly and consistently on the first canonical variate across all national samples. Moreover, positive affect (except for Sweden) and life satisfaction (except for Latvia) reach loadings above the cutoff value of $r > .35$, although standardized coefficients in these variables indicate redundancy given the other variables in the set. Negative affect, however, is not part of the first relational pattern (except for Hungary). Thus, focusing again mainly on the loadings, we find that the first canonical variate in the healthy aging variable set is particularly characterized by observed and perceived independence in daily activities and well-being in terms of environmental mastery, as well as low scores of depression.

In sum, the findings from the first canonical correlation indicated a pattern of association between housing and healthy aging such that healthy aging in terms of objective and perceived independence in daily activities and subjective well-being in very old age is closely and consistently related to aspects of objective and perceived housing. In other words, participants with a low magnitude of accessibility problems, but not those with low numbers of barriers, who perceive their homes as meaningful on a behavioral level and partially as useful to perform activities and who consider external influences as irrelevant to their current housing situation (low external control), are or perceive themselves to be more independent in daily activities, feel better in terms of environmental mastery, and suffer less from depressive symptoms. Moreover, this pattern was founded across the national samples, suggesting cross-national comparability.

Table 6. Correlations of aspects on housing and healthy aging (first canonical variates).

	Sweden N= 346	Germany N= 450	UK N= 350	Hungary N= 337	Latvia N= 267
Eigenvalues	1.2***	1.3***	1.6***	1.6***	1.8***
Canonical correlations (%)	.74 (73)	.75 (79)	.78 (74)	.78 (72)	.80 (68)
Housing variable set					
Environmental barriers	-.03 (.15)	-.08 (-.01)	-.09 (.07)	-.21 (.21)	.02 (.12)
Magnitude of accessibility problems	-.73 (-.48)	-.61 (-.30)	-.67 (-.32)	-.69 (-.45)	-.69 (-.34)
Usability in the home					
Physical environmental aspects	.45 (.05)	.42 (.03)	.58 (.09)	.43 (.06)	.36 (.03)
Activity aspects	.64 (.24)	.71 (.35)	.55 (.08)	.27 (.03)	.72 (.28)
Meaning of home					
Behavioral aspects	.81 (.45)	.74 (.38)	.85 (.45)	.82 (.40)	.86 (.36)
Physical aspects	.17 (-.08)	.57 (.17)	.68 (.15)	.63 (.04)	.59 (.03)
Cognitive–emotional aspects	.34 (.18)	.35 (.03)	.45 (.10)	.61 (.19)	.58 (.11)
Social aspects	.30 (-.03)	.13 (-.08)	.35 (-.09)	.46 (-.03)	.52 (.01)
Housing-related ext. control beliefs	-.53 (-.21)	-.58 (-.20)	-.64 (-.33)	-.75 (.34)	-.66 (-.26)
Housing satisfaction	.05 (.06)	.16 (-.03)	.15 (-.09)	.28 (.02)	.08 (.01)
Healthy aging variable set					
Independence in daily activities (ADL)	.83 (.52)	.68 (.37)	.75 (.34)	.68 (.30)	.78 (.37)
Perceived functional independence	.80 (.41)	.76 (.38)	.82 (.37)	.80 (.23)	.87 (.46)
Life satisfaction	.36 (.04)	.50 (.13)	.47 (-.01)	.64 (.08)	.29 (-.07)
Environmental mastery (Ryff)	.59 (.23)	.76 (.45)	.66 (.20)	.84 (.41)	.58 (.18)
Depression (GDS)	-.55 (-.12)	-.53 (.01)	-.76 (-.42)	-.78 (-.24)	-.70 (-.32)
Positive affect (PANAS)	.33 (.05)	.43 (.10)	.39 (.02)	.46 (.09)	.49 (.04)
Negative affect (PANAS)	-.22 (-.06)	-.32 (.01)	-.28 (.06)	-.39 (.01)	-.26 (.04)

Notes: Subsamples are reduced as a result of listwise deletion in canonical correlation procedures.

Standardized canonical coefficients are shown in parentheses; correlations >.35 are boldfaced.

*** $p < .001$.

The second canonical correlations also revealed significant patterns of relationships for all national samples; however, the degrees of overall explained variance were considerably low ($\leq 19\%$). The canonical correlation for the second pair of linear composites in Sweden was $R = .42$ and accounted just for 13% of the overall covariance between housing and healthy aging. In Germany, $R = .41$ (13%); in the UK, $R = .52$ (16%); in Hungary, $R = .50$ (15%); and in Latvia, $R = .58$ (19%). Loadings and standardized canonical coefficients are reported in detail (Table 7).

Emphasizing only the most consistent findings and highest loadings, the second canonical correlations revealed patterns in which physical, cognitive–emotional, and social meanings of home in all national samples are highly (loadings $< .35$) related to environmental mastery in all samples. Further, these meaning aspects are linked to high amounts of behavioral independence (ADL) in all national samples, except for Sweden, as well as to low levels of depression and high scores of life satisfaction, except for Germany. In addition, negative affect appeared with substantial negative loadings in Germany, the UK, and Latvia, and positive affect showed high positive loadings in the Swedish and the UK samples.

In sum, the findings from the second canonical variate indicated a pattern of association between housing and healthy aging such that nonbehavioral aspects of meaning of home are related to healthy aging in terms of independence in daily activities (except for Sweden) and subjective well-being in terms of environmental mastery, and for some national samples also with depression and affect. In other words, participants who perceived their homes as meaningful as a result of physical, social, or cognitive–emotional aspects tend to be more independent in daily activities, feel better in terms of environmental mastery, and—in some national samples—in terms of positive affect; they also suffered less from depressive symptoms and negative affect.

Table 7. Correlations of aspects on housing and healthy aging (second canonical variates).

	Sweden N= 346	Germany N= 450	UK N= 350	Hungary N= 337	Latvia N= 267
Eigenvalues	0.2***	0.2***	0.4***	0.3***	0.8***
Canonical correlations (%)	.42 (13)	.41 (13)	.52 (16)	.50 (15)	.58 (19)
Housing variable set					
Environmental barriers	-.14 (-.12)	-.28 (-.18)	.12 (.15)	.24 (.20)	.12 (.04)
Magnitude of accessibility problems	.15 (.13)	.18 (.27)	.37 (.44)	-.23 (-.43)	-.25 (.37)
Usability in the home					
Physical environmental aspects	.06 (-.15)	.02 (-.14)	.15 (.15)	.18 (.48)	.17 (.17)
Activity aspects	-.12 (-.13)	-.06 (-.24)	-.03 (-.09)	.01 (-.11)	-.24 (-.54)
Meaning of home					
Behavioral aspects	-.07 (-.39)	-.03 (-.22)	-.08 (-.68)	.03 (.42)	.07 (-.29)
Physical aspects	.54 (.31)	.41 (.34)	.51 (.67)	-.54 (-.42)	.47 (.32)
Cognitive-emotional aspects	.61 (.48)	.36 (.18)	.57 (.44)	-.56 (-.37)	.54 (.45)
Social aspects	.52 (.34)	.50 (.40)	.50 (.15)	-.65 (-.48)	.65 (.54)
Housing-related ext. control beliefs	-.35 (-.32)	-.20 (-.21)	-.21 (-.21)	.21 (.05)	-.16 (-.15)
Housing satisfaction	.47 (.39)	.66 (.65)	.25 (.11)	-.01 (.12)	.20 (.02)
Healthy aging variable set					
Independence in daily activities (ADL)	-.27 (.40)	-.54 (-.59)	-.48 (-.59)	.67 (.74)	-.46 (-.55)
Perceived functional independence	-.23 (-.48)	-.29 (-.38)	-.24 (-.32)	.25 (.32)	-.19 (-.28)
Life satisfaction	.36 (.03)	.13 (-.04)	.36 (.11)	-.36 (-.15)	.49 (.14)
Environmental mastery (Ryff)	.51 (.53)	.60 (.78)	.52 (.46)	-.37 (-.43)	.63 (.42)
Depression (GDS)	-.61 (-.60)	-.16 (.04)	-.40 (-.17)	.41 (.48)	-.59 (-.40)
Positive affect (PANAS)	.51 (.31)	.17 (.20)	.47 (.37)	-.05 (.03)	.33 (.14)
Negative affect (PANAS)	-.15 (.16)	-.45 (-.18)	-.47 (-.25)	-.13 (-.16)	-.47 (-.18)

Notes: Subsamples are reduced as a result of listwise deletion in canonical correlation procedures. Standardized canonical coefficients are shown in parentheses; correlations >.35 are boldfaced.

*** $p < .001$.

As one can see in Table 8, the first canonical correlations were highly congruent across the five national samples; that is, this first relational pattern appeared rather general and not sample specific, indicating a dominant common pattern of relationships between aspects of housing and healthy aging. In contrast, the second relational pattern came with lower congruence scores across the national samples and hence comprised more specific aspects of relationships between housing and healthy aging.

Table 8. Pairwise comparisons of loading patterns for the five national samples.

Congruence Scores of Canonical Correlation Loadings	Sweden	Germany	UK	Hungary	Latvia
Sweden	—	0.85	0.91	−0.78	0.91
Germany	0.96	—	0.88	−0.80	0.85
UK	0.97	0.98	—	−0.86	0.97
Hungary	0.91	0.95	0.97	—	−0.85
Latvia	0.97	0.97	0.98	0.95	—

Notes: Tucker's coefficients of congruence are used. Congruence scores of the first canonical correlation loadings between each research site are listed in the lower left part of the table (i.e. below the diagonal of empty cells); congruences of the second canonical loadings are shown in the upper right part. Because of inverse loading patterns (see Tables 3 and 4), negative scores occur in some national samples.

7.3. Relation of housing aspects to perceived health among ADL Independent and ADL Dependent groups of very old people in the Germany, Sweden and Latvia (Study 3)

Comparisons between the three countries within each ADL group as well as between ADL groups within each country showed statistically significant differences for all aspects of housing except accessibility problems in the ADL independent group (Tables 9 and 10). Even if the number of environmental barriers in housing in Latvia was lower, in the ADL dependent group there were higher scores of accessibility problems than in Germany and Sweden. Further in Latvia, participants had smaller number of rooms and revealed lower housing satisfaction in both ADL groups. Also, the different aspects of usability and meaning of home had lower scores in Latvia and higher scores of external housing related control beliefs in both ADL groups. Concerning number of environmental barriers, housing standard (number of rooms) and housing satisfaction, there were no significant differences between the two ADL groups in any of the countries. There were differences between ADL groups concerning usability and meaning of home aspects.

Overall, ADL dependent groups had higher scores of external housing related control beliefs.

Studying relationship between perceived health and different aspects of housing in the ADL groups, variant patterns were displayed (Table 11). Accessibility problems were stronger related to perceived health in all three countries, in both ADL groups. Especially in the ADL dependent group in Sweden, perceived health was influenced by perceived housing aspects. Similar but slightly weaker relations were found in the ADL independent groups in Sweden and Latvia.

Turning to the multivariate regression analyses (Table 12), the results showed that for persons with different levels of ADL dependence in the three national samples, different aspects of housing were related to perceived health. Objective aspects of housing influenced perceived health among the ADL independent participants in all three national samples, in particular accessibility problems. When it came to perceived aspects of housing (i.e. various aspects of usability and meaning of home) the result pattern was more varied. Among participants dependent in ADL, objective as well as perceived aspects of housing were influential on perceived health, while there were differences among the national samples. None of the considered confounders influenced the results.

Table 9. Background characteristics, functional limitations/dependence on mobility devices and perceived health (the outcome variable), per country and for ADL groups

		ADL independent group			p ^a	ADL dependent group			p ^a	p ^b		
		German y n = 149	Latvia n = 202	Sweden n = 151		German y n = 270	Latvia n = 90	Swede n n = 236		Ger Lat	Lat	Sw e
Sex (%)	Male	18.8	12.9	15.9	n.s.	24.1	7.8	31.4	0.000	n.s.	n.s.	0.001
	Female	81.2	87.1	84.1		75.9	92.2	68.6				
Age (years)	Mean	84.4	78.9	83.7	0.000	86.3	80.7	86.2	0.000	0.001	0.000	0.000
	(SD)	(3.1)	(2.5)	(3.0)		(3.0)	(2.3)	(2.9)				
Monthly income (Euro)												
	Median	1375	100	900	0.000	1500	100	900	0.000	n.s.	n.s.	n.s.
	(Q1-Q3)	(1000-1825)	(100- 100)	(800-1025)		(1000- 2000)	(100- 100)	(800- 1170)				
No. of functional limitations												
	Median	2	2	2	0.015	4	4.5	3	0.000	0.000	0.000	0.000
	(Q1-Q3)	(1-4)	(2-4)	(1-4)		(2- 6)	(3- 6.25)	(2- 5)				
Dependence on mobility devices (%)												
	Yes	15.4	9.4	22.5		43.7	61.1	55.9				
	No	84.6	90.6	77.5		56.3	38.9	44.1				
In general would you say your health is (%)												
	Poor	2.0	20.3	2.0		10.4	54.4	4.7				
	Fair	47.7	61.9	18.5		54.1	41.1	28.4				
	Good	39.6	15.8	31.1	0.000	26.7	3.3	32.6	0.000	0.000	0.000	0.000
	Very good	8.7	1.0	29.1		7.8		24.2				
	Excellent	2.0	0.5	19.2		0.7		10.2				

p^a – differences between countries

p^b – differences between ADL groups

Table 10. Objective and perceived aspects of housing per country and for ADL groups

		ADL independent group				ADL dependent group				P ^b		
		Germany n=149	Latvia n = 202	Sweden n = 151	p ^a	Germany n = 270	Latvia n = 90	Sweden n = 236	p ^a	Ger	Lat	Swe
No. of environmental barriers^a	Median (Q1-Q3)	66 (61-72)	55 (50-62)	67 (57-74)	0.000	66 (60- 73)	54 (47- 62)	63 (56- 73)	0.000	n.s.	n.s.	n.s.
Accessibility Problems^b	Median (Q1-Q3)	77 (28-136)	80 (45-150)	68 (13-165)	n.s.	163 (63- 277)	212 (127- 297)	173 (75- 263)	0.004	0.000	0.000	0.000
Housing standard, no of rooms	Median (Q1-Q3)	3 (2- 3)	1 (1- 2)	3 (2- 3)	0.000	3 (2- 3)	1 (1- 2)	3 (2- 4)	0.000	n.s	n.s	n.s
UIMH^c, Activity aspects	Median (Q1-Q3)	20 (18-20)	16 (14-18)	19 (18-20)	0.000	18 (15- 20)	11 (7- 15)	18 (15- 20)	0.000	0.000	0.000	0.001
UIMH, Environmental aspects	Median (Q1-Q3)	29 (25-30)	19.2 (16 -22.8)	29 (27-30)	0.000	27 (24- 29)	15 (12- 21)	28 (25- 30)	0.000	0.000	0.000	0.017
Housing satisfaction^d	Median (Q1-Q3)	5 (4- 5)	4 (2- 4)	5 (5- 5)	0.000	5 (4- 5)	4 (3- 5)	5 (5- 5)	0.000	n.s	n.s	n.s
MOH^e, Physical aspects	Median (Q1-Q3)	9.57 (8.57-10.00)	6.93 (6.00-7.77)	9.14 (8.43-10.00)	0.000	8.85 (8.42- 9.71)	6.14 (5.33- 7.16)	9.07 (8.42- 10.00)	0.000	0.000	0.000	n.s
MOH, Activity aspects	Median (Q1-Q3)	9.83 (8.83-10.00)	7.83 (7.00-8.33)	9.67 (8.67-10.00)	0.000	8.83 (7.66- 9.83)	5.83 (4.71- 7.00)	8.33 (7.00- 9.50)	0.000	0.000	0.000	0.000
MOH, Cognitive/emotional aspects	Median (Q1-Q3)	9.00 (8.30-9.50)	7.80 (7.10-8.50)	8.80 (8.20-9.15)	0.000	8.80 (8.10- 9.30)	7.30 (6.41- 7.90)	8.50 (7.70- 9.00)	0.000	n.s	0.001	0.002
MOH, Social aspects	Median (Q1-Q3)	8.00 (7.00-8.80)	7.00 (6.00-8.20)	9.00 (8.00-10.00)	0.000	8.00 (7.00- 9.00)	6.25 (5.05- 7.71)	8.80 (7.60- 10.00)	0.000	n.s	0.002	n.s
Housing related control beliefs^f, External control	Median (Q1-Q3)	2.56 (2.13-3.06)	3.00 (2.73-3.25)	2.75 (2.38-3.00)	0.000	2.93 (2.43- 3.37)	3.31 (3.06- 3.56)	2.87 (2.56- 3.25)	0.000	0.000	0.000	0.000

Ger, Lat, Swe- Germany, Latvia, Sweden

p^a – differences between countries

p^b – differences between ADL groups

^a Higher scores indicate higher amount of environmental barriers

^b Higher scores indicate higher accessibility problems

^c Higher scores indicate greater subjective housing usability (Usability of My Home questionnaire)

^d Higher scores indicate higher satisfaction (Housing Options for Older People questionnaire)

^e Higher scores indicate higher agreement in satisfaction (Meaning of Home questionnaire)

^f Higher scores indicate stronger beliefs in this domain (Housing – Related Control Beliefs questionnaire)

Table 11. Univariate analyses of perceived health, per country and for ADL groups

		ADL independent group			ADL dependent group		
		Germany n = 149	Latvia n = 202	Sweden n = 151	Germany n = 270	Latvia n = 90	Sweden n = 236
No. of environmental barriers	Estimate	0.031	0.030	-0.027	0.003	0.026	-0.037
	(95% CI)	(-0.005; 0.067)	(0.003; 0.057)	(-0.055; 0.000)	(-0.020 ; 0.027	(-.059 ; 0.014)	(-0.058 ; -0.017)
	P-value	0.089	0.030	0.048	0.785	0.223	0.000
Accessibility Problems	Estimate	-0.008	-0.007	-0.008	-0.004	-0.005	-0.005
	(95% CI)	(-0.013 ; -0.004)	(-0.010 ; -0.004)	(-0.011; -0.005)	(-0.005 ; -0.002)	(-0.008 ; -0.001)	(-0.007 ; -0.003)
	P-value	0.000	0.000	0.000	0.000	0.017	0.000
Housing standard, no of rooms	Estimate	0.235	0.592	0.184	0.033	-0.512	0.108
	(95% CI)	(-0.060; 0.531)	(0.097; 1.087)	(-0.051; 0.419)	(-0.139 ; 0.204)	(-1.273 ; 0.248)	(-0.072 ; 0.288)
	P-value	0.118	0.019	0.125	0.708	0.187	0.241
UIMH, Activity aspects	Estimate	-0.056	0.077	0.210	0.031	0.098	0.121
	(95% CI)	(-0.203; 0.090)	(-0.009; 0.163)	(0.068 ; 0.352)	(-0.030 ; 0.094)	(0.006 ; 0.190)	(0.051 ; 0.191)
	P-value	0.453	0.078	0.004	0.318	0.036	0.001
UIMH, Environmental aspects	Estimate	-0.036	0.110	0.147	0.112	0.049	0.143
	(95% CI)	(-0.129; 0.058)	(0.047-0.173)	(0.044 ; 0.249)	(0.052 ; 0.171)	(-0.026 ; 0.126)	(0.078 ; 0.208)
	P-value	0.457	0.001	0.005	0.000	0.202	0.000
Housing satisfaction	Estimate	-0.165	-0.029	0.848	0.067	-0.322	0.489
	(95% CI)	(-0.524 ; 0.193)	(-0.233 ; 0.176)	(0.351 ; 1.346)	(-0.280 ; 0.414)	(-0.646 ; -0.002)	(0.109 ; 0.868)
	P-value	0.366	0.785	0.001	0.705	0.052	0.12
MOH, Physical aspects	Estimate	0.148	0.211	0.530	0.213	0.071	0.377
	(95% CI)	(-0.160 ; 0.455)	(-0.006 ; 0.428)	(0.227-0.833)	(-0.011 ; 0.438)	(-0.212 ; 0.355)	(0.165 ; 0.588)
	P-value	0.347	0.057	0.001	0.063	0.622	0.000
MOH, Activity aspects	Estimate	0.079	0.339	0.240	0.248	0.268	0.093
	(95% CI)	(-0.284 ; 0.441)	(0.122 ; 0.556)	(-0.078 ; 0.558)	(0.076 ; 0.420)	(0.001 ; 0.535)	(-0.036 ; 0.224)
	P-value	0.671	0.002	0.139	0.005	0.049	0.159
MOH, Cognitive/emotional aspects	Estimate	0.039	0.360	0.411	0.045	0.358	0.204
	(95% CI)	(-0.317 ; 0.395)	(0.110 ; 0.610)	(0.031 ; 0.791)	(-0.225 ; 0.315)	(0.014 ; 0.702)	(-0.008 ; 0.415)
	P-value	0.828	0.005	0.34	0.742	0.041	0.060
MOH, Social aspects	Estimate	-0.107	0.273	0.210	-0.036	0.179	0.187
	(95% CI)	(-0.295 ; 0.081)	(0.102 ; 0.445)	(-0.031 ; 0.451)	(-0.189 ; 0.117)	(-0.062 ; 0.420)	(0.031 ; 0.342)
	P-value	0.265	0.002	0.087	0.644	0.145	0.018
Housing related control beliefs, External control	Estimate	-0.532	-0.526	-0.580	-0.549	-0.303	-1.186
	(95% CI)	(-1.042 ; -0.023)	(-1.283 ; 0.231)	(-1.1228 ; 0.068)	(-0.942 ; -0.156)	(-1.279 ; 0.674)	(-1.703 ; -0.670)
	P-value	0.040	0.173	0.080	0.006	0.543	0.000

Note: In bold represented variables where P-values below 0.05 were considered statistically significant.

Table 12. Results of regression analyses per country and for ADL groups, with perceived health as the outcome variable

		ADL independent group			ADL dependent group		
		Germany n=149	Latvia n=202	Sweden n=151	Germany n=270	Latvia n=90	Sweden n=236
No. of environmental barriers	Estimate	0.047	0.056	-0.001	0.003	-0.007	-0.028
	(95% CI)	(0.009 ; 0.086)	(0.025 ; 0.088)	(-0.031 ; 0.029)	(-0.021 ; 0.029)	(-0.021 ; 0.029)	(-0.051 ; -0.005)
	P-value	0.017	0.001	0.963	0.768	0.803	0.014
Accessibility problems	Estimate	-0.010	-0.009	-0.008	-0.003	-0.003	-0.004
	(95% CI)	(-0.014 ; -0.005)	(-0.013 ; -0.005)	(-0.011 ; -0.005)	(-0.005 ; -0.001)	(-0.060 ; 0.047)	(-0.006 ; -0.001)
	P-value	0.000	0.000	0.000	0.004	0.247	0.001
UIMH, Environmental aspects	Estimate	-0.010	0.107	-0.047	0.108	0.024	0.005
	(95% CI)	(-0.132 ; 0.112)	(0.035 ; 0.178)	(-0.170 ; 0.075)	(0.032 ; 0.0183)	(-0.073 ; 0.123)	(-0.073 ; 0.083)
	P-value	0.872	0.003	0.450	0.005	0.625	0.898
Housing satisfaction	Estimate	-0.234	-0.050	0.911			
	(95% CI)	(-0.687 ; 0.219)	(-0.284 ; 0.183)	(0.364 ; 1.458)			
	P-value	0.311	0.672	0.001			
MOH, Physical aspects	Estimate	0.279	-0.057	0.412	0.090	-0.045	0.300
	(95% CI)	(-0.071 ; 0.629)	(-0.328 ; 0.214)	(0.091-0.733)	(-0.170 ; 0.351)	(-0.455 ; 0.364)	(0.061 ; 0.539)
	P-value	0.119	0.678	0.012	0.497	0.828	0.014
MOH, Cognitive/emotional aspects	Estimate				-0.189	0.550	0.170
	(95% CI)				(-0.498 ; 0.120)	(0.105 ; 0.996)	(-0.061 ; 0.402)
	P-value				0.231	0.015	0.151
MOH, Social aspects	Estimate	-0.229	0.148				
	(95% CI)	(-0.443 ; -0.015)	(-0.055 ; 0.351)	0.144 (-0.112 ; 0.400)			
	P-value	0.036	0.153	0.271			
Housing related control beliefs, external control	Estimate				-0.380	0.742	-0.753
	(95% CI)				(-0.796 ; 0.035)	(-0.500 ; 1.984)	(-1.312 ; -0.194)
	P-value				0.073	0.242	0.008
Pseudo R-Square	Cox and Snell	0.183	0.206	0.288	0.126	0.124	0.228
	Nagelkerke	0.207	0.240	0.305	0.140	0.157	0.241
	McFadden	0.093	0.118	0.118	0.058	0.085	0.089

Note: In bold represented variables where P-values below 0.05 were considered statistically significant.

8. Discussion

To the best of my knowledge, the findings of this thesis represent quite novel knowledge on home and health among very old Europeans, viewed from a Latvian perspective. Overall, applying quantitative as well as qualitative methodology, the three papers building up the thesis give valuable information on different aspects of home and health in very old age. The qualitative paper illustrates in depth what old single-living people in urban Latvia are doing at home and what meaning the activities, they perform, have to them. The cross-national findings demonstrate relationships between aspects of housing and health and show that, despite obvious differences between the countries in terms of socio-economic standard, societal support systems, culture, etc., the relationships are surprisingly similar across countries. The sub-group differences demonstrated pinpoint the need for more differentiated considerations based on differences in ADL capacity, including issues of housing provision meeting the needs of different groups of older people.

The importance of supporting older people's activity performance is well documented in the research literature [92-94], while Study 1 of this thesis is the first study ever from a Latvian perspective. Most important, applying well-known qualitative methodology [73, 74], these findings give voice to very old, Latvian people themselves. Different activities seem to help very old people to organize and structure the flow of their time. Further, activity performance not only supports daily life but also support maintenance of valued social roles, feeling of health and well-being. These findings confirm the Activity theory statement that there is positive relationship between activity performance and life satisfaction [36]. The ageing process and functional decline impact on the patterns of how very old people construct their everyday life. A unique possibility given by the ENABLE-AGE Project context was to compare qualitative findings across countries. Results from the Swedish ENABLE-AGE In-depth Study are similar to the Latvian results presented in Study 1, showing that having a sense of being independent as regards all forms of activity, such as household chores, means a lot for very old people's self-confidence. Further, such chores seem to have a confirmatory effect, followed by experiences of pride and satisfaction linked to home. With great similarity between countries as diverse as Sweden and Latvia, very old people continuously struggle for independence by performing activities in the way they had always been performed [95].

Everyday household chores seem to provide old people with a sense of control over their environment, and often highlight the centrality of the home in their lives [96]. Daily activities performed by old people at home in Latvia were most common and it relate with

findings in studies from other countries because the home environment is the person's major living space in old age, in terms of the increased time people spend at home, as well as in terms of the number of activities that takes place inside the home [97].

Activities providing interaction with other people in a familiar context and providing feelings of belonging, to be part of the world, are important to old people. Also the fact that many very old people put a lot of value in doing things for others as well as doing productive things confirms that productivity is important for older people and that it is important that the product is valued by others [98]. Other research shows that feelings of still being able to contribute with knowledge and skills, and a sense of being worth something seem to strengthen personal identity, and added to the feeling of still being a valued part of the society [99]. The findings also indicate that factors such as financial limitations, health status, functional limitations, and environmental barriers can affect very old people's activity and participation negatively.

Turning to the investigation of relationships between aspects of housing and healthy ageing in very old age, we found that a more accessible and usable home, a strong attachment to the home environment and less external control beliefs are linked to higher functional autonomy and better well-being in terms of more environmental mastery and lower depression scores. The data gave empirical evidence that both objective and perceived housing aspects are related to indicators of healthy ageing. However, not the number of barriers in the home environment, but the magnitude of P-E fit (accessibility) prove being influential on healthy ageing. In addition, particularly behavioural aspects of the meaning of home are closely linked with selected domains of healthy ageing. In contrast however, housing satisfaction, life satisfaction and global positive and negative affect indicators did not play a major role in the pattern of relationships of housing and healthy ageing. In addition, it was shown that, in accordance with the assumptions in the literature, functional health outcomes such as autonomy in day-to-day living is triggered by objective housing accessibility, i.e. P-E fit. Thus, this thesis contributes to the empirical knowledge base demonstrating that outcomes of healthy ageing in very old age are substantially linked to variation in environmental contexts [51, 53, 100- 101]. Moreover, as far as meaningful aspects of housing are concerned, it was shown that, in accordance with the assumptions in the literature, loss in cognitive or emotional aspects of well-being such as depression is at least partially linked to subjective home-related processes, such as meaning of home, usability in the home and housing-related control beliefs. Thus, processes of perceived housing are

important facets of the p-e system in later life, adding to a wider understanding of housing and healthy ageing [56, 59, 102, 103].

From a broader perspective on healthy ageing, independence in daily life and well-being indicating a “good life, is linked to both objective and perceived housing. That is, the results indicate that it is not sufficient to consider only objective or subjective aspects of housing. Instead it seems to be appropriate to always address both domains, even if only behavioural, cognitive or emotional aspects are of interest, as they are independently related to such aspects of functional independence and psychological well-being. Especially this aspects need to be considered in relation to optimisation of housing counselling and adaptation for future cohorts of older adults.

Turning to the results of Study 3, different aspects of housing seem to be influential on perceived health depending on whether the very old person is independent or dependent in ADL. Although not consistent, there is a tendency that objective aspects of housing are more influential on perceived health among ADL independent very old people than among those dependent on help from others. That is, these results indicate that accessibility problems might be of different importance to persons with different ADL capacity, on a general level supporting Lawton and Nahemow’s docility hypothesis [49].

The ENABLE-AGE project provided empirical support for at least partially cross-national comparability of the relationship of housing and healthy ageing in different European sites, indicating the global importance of housing for healthy ageing. Discussions in previous literature [104] support the value and importance of cross-national research for establishing the generalisability of findings and the validity of interpretations derived from single national studies. Within this thesis only data from first wave of the ENABLE-AGE Project were used, while longitudinal analyses are needed to show whether relations between objective and subjective housing, or between housing and healthy ageing, will remain stable or change over time.

9. Methodological considerations

Since this thesis is based on data from a large European inter-disciplinary project, it is necessary to discuss advantages and disadvantages of this experience. A number of challenges of this complex, inter-disciplinary, cross-national research project have been described earlier [105].

From a Latvian perspective it was a great opportunity to have the resources needed to be able to target very old people in their home settings, and allowed us to collect unique information on different aspects of ageing, health, and housing. In particular, this was challenging for the occupational therapists involved in the national project team, representing a young profession in Latvia. Overall, it was important but challenging to keep up with the competence standards of occupational therapy and geriatrics, and required professional skills for interviewing and observing very old people outside the clinical setting. Taking an active role in a cross-national research consortium was also challenging but inspiring.

To date, the data collected have not been utilized to the full potential. Thus, during years to come they can serve as base for further exploration of aspects of home and health in Latvia [106]. Moreover, they continue to deepen the co-operation with the former ENABLE-AGE partners on research questions in the European context. As cross-national research on very old people living in the community still is in its infancy, the findings have potential to nurture the evolution of cross-national research in Europe. In particular in Eastern Europe, research involving detailed data collection with very old people in private homes is virtually non-existing, and thus even the descriptive level of the results presented are quite unique.

The sampling procedure of ENABLE-AGE was oriented to very old participants living alone in their own homes, due to the increased risk of declining participation and independence as well as social isolation [105]. It should be kept in mind that the ENABLE-AGE Project had an explicitly explorative approach and the samples were not nationally representative. Thus, the results presented are indicative and point out directions for further research.

As reported earlier in this thesis, substantial efforts were invested in finding alternative strategies for recruiting a valid sample. The sampling was difficult since data collection during home visits represented a new phenomenon in Latvia. That is, often people were the suspicious, they considered offers to participate in research with anxiety, and were mostly negatively disposed. Comparatively poor living conditions that are quite common to very old people in Latvia as well as cases of violence and criminal offences strengthened the negative

attitudes towards participation in the project. It is important to have in mind that the frailest group of old people living at home was very difficult to reach for this study [107, 108]. In order to compensate for such weaknesses, alternative sampling strategies could have been applied, e.g. by means of using different health care agencies in order to reach this segment of the very old population.

Continuing the discussion as concerns sampling, in Study 3, based on data from Germany, Latvia and Sweden, the sample sizes differed between the ADL groups. In particular, the ADL dependent group in Latvia was smaller, with only few men. The reasons for this were mainly the shorter life expectancy among men in the country, and the fact that in Latvia those living until higher ages seldom live alone [15]. Another issue worth discussing is that it would have been of interest to study three ADL dependence levels as often done in ageing research [5, 109], but the small sub-group samples in all national samples did not really allow for valid analyses using such an approach.

The fact that all ENABLE-AGE Project participants lived in urban districts deserves attention. In Latvia, the participants lived in Riga and Jurmala. Thus, the results describe the situation of older people living in different urban regions of Europe, while the situation of those living in rural areas remains unknown. Probably, the social situation in the countryside is more disadvantaged, including limited access to and quality of health care services, impacting on mortality rates and for this group of the population [110]. Studies on rural elderly, including comprehensive data collection such as in the ENABLE-AGE Project, does not exist in Latvia and is very scarce also on an international level. Further studies are needed to reveal if comparable patterns of relations among aspects of home and health exist in other groups of elders or in other research districts.

The opportunity to work in a cross-national and inter-disciplinary context allows to afford quantitative and develop qualitative methods in rehabilitation research, particularly in occupational therapy, in Latvia. Qualitative research methods do not have strong traditions in health care research in Latvia, and the lack of multi-disciplinarity in the national research team and of experience in qualitative research could have had an impact on the data analysis process. Therefore, extra support from the scientifically more experienced ENABLE-AGE partners was provided along the project period, in order to facilitate and ensure quality of the data gathering and analysing process. Another issue likely to improve the trustworthiness and validity of the qualitative findings and the overall quality of the interviews was the fact that all participants had taken part in the ENABLE-AGE Survey Study. The participants were familiar with the interview procedure, contributing to a sense of feeling comfortable, and

confident in talking to the visiting researcher. Furthermore, interviewing very old people could be complex, and diversities and differences in age and sex between the interviewer and the interviewee most probably have significant implications. In this respect, the fact that the interviewer team consisted solely of five young female interviewers, all occupational therapists, is a limitation or source of bias worth keeping in mind.

10. Implications for practice

One important outcome of the ENABLE-AGE Project is that a lot of new assessments, not available in any Eastern European country before, were translated into Latvian and Russian. During the project period, these instruments were empirically tested and optimized and are now available for use in everyday practice contexts. Most important, specialists working with older people, in rehabilitation settings as well as in home settings can make use of the new instrument arsenal. For example, the results demonstrate that the Housing Enabler is a useful tool to capture essential objective aspects of housing. Since it comprises a personal as well as an environmental component generating data that can be utilized separately for descriptive purposes as well as to generate a valid score on accessibility problems, it is powerful in studies targeting such aspects. In line with the results from other studies [63, 109] there is good reason to emphasize the validity and usefulness of the “home assessment package” used in this project, including evaluation of objective as well as perceived aspects of housing. This instrumentation has potential to strengthen research and practice efforts targeting housing adaptations and housing provision for senior citizens across Europe, not the least in countries in transition.

Besides their value for future research, the results of this study are useful for health care practitioners working with old people in home settings. In particular, the results serve to alert rehabilitation staff to the fact that different levels of functional independence require different environmental interventions, e.g. when it comes to housing adaptation or recommendations for relocation. That is, objective aspects of housing should be assessed and adaptations effectuated in early stages of functional decline, when ADL independence still remains. This seems to hold for different national contexts in Europe. In that way, using the Housing Enabler assessment results to come up with individually tailored intervention plans, housing adaptation can serve as a preventive measure with potential to maintain ADL independence in old and very old age. In current practice, this kind of intervention is most often used as a compensatory solution in cases when ADL independence already is declined or turned into dependence. Concerning perceived aspects of housing, the results are somewhat mixed, while indicating, in line with a previous ENABLE-AGE study [63], that such factors influence perceived health in complex patterns. In particular, it should be highlighted that more ADL dependent older persons might need other kinds of interventions than only removal of physical environmental barriers. This kind of knowledge is new and draws the attention to the fact that intervention in the homes of old and very old people are not only a

technical matter of housing design and removal of physical barriers and risk factors. Based on assessments targeting perceived aspects as well, more efficient and targeted interventions remain to be developed, and our results can serve as a base for such developments. In order to do so, more research of this kind is needed. That is, future research is still necessary to nurture the development of evidence-based, practical interventions, but the results of this thesis emphasize that perceived aspects of housing should not be neglected in community-based health care.

Another implication of findings links to considerations about when is time for an older person to relocate. The relationship between housing accessibility and ADL dependence has already been demonstrated [111], while the current study adds to this knowledge base in that it indicates that in certain phases of the process of functional decline, it might be more beneficial for the older person to relocate than to undertake substantial housing adaptations in his/her current home. Turning to the health promotive perspective, building more accessible housing for senior citizens could really be an important preventive strategy.

11. Conclusions

- Very old people in Latvia maintain their well-being through the subjective choice and integration of different activities into their everyday life and this match the kind of universal pattern within the ageing process.
- It is necessary to consider everyday activity performance (functional health) in the decision process aiming to provide the appropriate services to very old people. The evaluation of needs should include not only assessment of P-ADL but also of a wider range of I-ADL, emphasizing different aspects of activity and participation.
- Aspects of housing are particularly linked to objective and perceived independence in daily life. The accessibility at home is linked to behavioral autonomy, and it is not only behavioral autonomy that is linked to various aspects of housing, but also aspects of well-being.
- Accessibility problems influence perceived health among very old people, while more pronounced among those independent in ADL (earlier stage of age-related functional decline) and this finding shows cross-national similarity among three countries (Germany, Sweden, Latvia).
- The pattern of relations between perceived aspects of housing and perceived health in very old age is more varied and displays diversity among three national samples (Germany, Sweden, Latvia).
- Usually in practice the attention is paid to objective aspects of housing, but a more holistic approach that takes perceived aspects of housing into account should be applied.
- Housing solutions for senior citizens should include a multidisciplinary approach to assessment and care planning. Home modifications and relocation should be negotiated with older persons themselves to take into account their personal needs and preferences. That is, the principles of client-centered practice should be applied.

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14. Appendices

Appendix 1. ENABLE-AGE Sampling schema

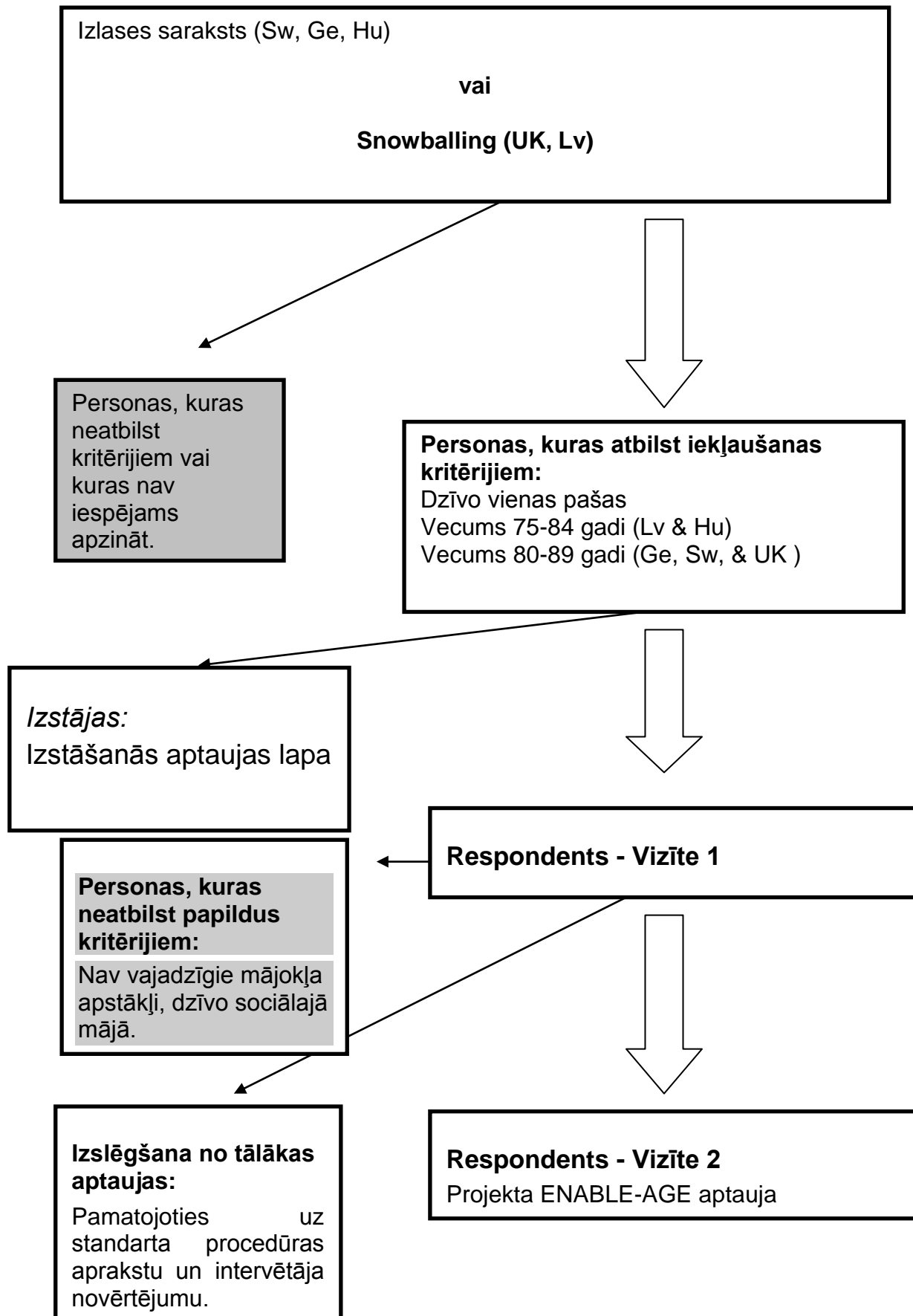
Appendix 2. ENABLE-AGE Drop-out list

Appendix 3. ENABLE-AGE Drop-out questionnaire

Appendix 4. Participants of ENABLE-AGE In-depth interviews

Appendix 5. Examples of instruments for ENABLE-AGE data collection

Appendix 1. ENABLE_AGE Sampling schema



Appendix 2. ENABLE-AGE Drop-out list

Pētnieciskais projekts

ENABLE-AGE

**(Autonomijas veicināšana, dalība un labklājība lielā vecumā:
mājas vide kā veselīgas novecošanas priekšnoteikums)**

QLKG-CT-2001-00334

Izstāšanās lapa

Izlases definīcijas aptauja: Personas, kuras neatbilst iekļaušanas kritērijiem vai, kuras nav iespējams apzināt.

1. Personas, kuras nav iespējams apzināt –iemesli, kādēļ nevar nodibināt kontaktus:

- ☐ Miris
- ☐ Aizbraucis, nedzīvo pēc minētās adreses
- ☐ Adrese neeksistē
- ☐ Nezināms iemesls; nav iespējams nodibināt kontaktus datu vākšanas laikā arī pēc atkārtotiem mēģinājumiem.
- ☐ Citi iemesli.....

2. Patreizējie dzīves apstākļi neatbilst iekļaušanas kritērijiem

- ☐ Nedzīvo viens pats

Appendix 3. ENABLE-AGE Drop-out questionnaire

Izstāšanās aptaujas lapa

Personas, kas nedzīvo atsevišķi netiks ietvertas šajā aptaujā. Šo aptaujas lapu ir jāpielieto vienīgi gadījumos, kad iesaistītā persona atbilst kritērijiem, kas nepieciešami iekļaušanai pētījumā, bet atsakās piedalīties tajā (mājas vizīte). (Skatīt izlases definējuma stratēģijas attēlu)

Intervētājam: Sāciet aizpildīt atbildes uz dotajiem jautājumiem (dažas atbildes jums jau ir zināmas pirms jūs piezvanāt personai).

1. Dzimums

- ☐ Vīrietis
☐ Sieviete

2. Dzimšanas gads:

3. Ģimenes stāvoklis

- ☐ Precējies(-usies), partneris dzīvo atsevišķi (piemēram, pansionātā)
☐ Neprecējies(-usies), dzīvo atsevišķi, bet ir tuvas attiecības ar partneri
☐ Šķīries(-usies)
☐ Artaitnis(atraitne)
☐ Nekad nav stājies(-usies) laulībā

4. Rajons, kurā atrodas dzīvesvieta:.....

5. Iemesli atteikumam piedalīties pētījumā :

- ☐ Neticība/Bailes
☐ Intereses un laika trūkums
☐ Intervija varētu būt pārāk apgrūtināša (fiziski vai/un psiholoģiski)
☐ Vāja veselība
☐ Citu cilvēku(radu vai draugu) atrunāšana
☐ Komunikācijas problēmas (valoda/dzirde, kognitīvie bojājumi, afāzija)
☐ Citi iemesli.....

Pajautāji personai, vai jūs drīkstētu uzdot dažus papildjautājumus, kas ir nozīmīgi atteikumu analīzei. Informējiet personu, ka viņam(viņai) nav noteikti jāatbild uz šiem jautājumiem, ja viņš(viņa) to nevēlas.

6. Vai jūs vispārīgi varētu apgalvot, ka jūsu veselība ir?

Teicama	Ļoti laba	Laba	Ciešama	Vāja
---------	-----------	------	---------	------



7. Cik apmierināts jūs visumā esat ar savu dzīvesvietu/ mājokli ?

- ☐ Ļoti neapmierināts(-āta)
- ☐ Neapmierināts(-āta)
- ☐ Neesat ne neapmierināts(-āta) , ne arī apmierināts(-āta)
- ☐ Apmierināts(-āta)
- ☐ Ļoti apmierināts(-āta)

8a. Kāda veida mājoklī jūs dzīvojat?

- ☐ Parastā mājoklī
- ☐ Sociālajā mājā

8b. Ja jūs dzīvojat parastā mājoklī, vai tā ir:

- ☐ Vienas ģimenes māja
- ☐ Terasveida māja, rindā izvietotu dzīvokļu māja, uz pusēm sadalīta māja
- ☐ "Parastā" bloku māja

Intervētājam: Tagad jūs noslēdzat interviju un pateiciaties personai par atbildēm uz jūsu jautājumiem.

Appendix 4. Participants of ENABLE-AGE In-depth interviews

Participant No.	M/F- age group	Diversity/barriers	Status/ Consultation
6	F-Y	Good health, low dependency, no barriers score	Analysed
12	F-Y	Poor health, high dependency, high barriers score	Analysed
49	M-Y	Poor health, high dependency, high barriers score	Analysed
57	M-Y	Good health, low dependency, low barriers score	Analysed
104	M-Y	Poor health, low dependency, low barriers	Transcr./ analysed Case study
328	F-O	Poor health, low dependency, low barriers score	Transcr./ analysed Case study
431	M-Y	Good health, low dependency, low barriers score	Analysed
468	F-Y	Poor health, high dependency, high barriers score	Transcr./ analysed
517	F-Y	Poor health, low dependency, low barriers score	Transcr./ analysed
656	F-O	Poor health, high dependency, high barriers score	Transcr./ analysed
775	F-O	Poor health, low dependency, high barriers score	Transcr./ analysed
742	M-O	Poor health, low dependency, low barriers score	Transcr./ analysed Case study
801	F-Y	Poor health, low dependency, high barriers score	Analysed
1013	F-Y	Poor health, low dependency, high barriers score	Transcr./ analysed
1028	F-O	Poor health, low dependency, high barriers score	Analysed
1185	F-O	Poor health, low dependency, low barriers score	Transcr./ analysed
1312	F-Y	Poor health, high dependency, high barriers score	Transcr./ analysed Case study
1541	M-O	Poor health, low dependency, high barriers score	Transcr./ analysed
1636	M-Y	Poor health, low dependency, high barriers score	Transcr./ analysed Case study
1637	F-Y	Good health, low dependency, low barriers score	Transcr./ analysed Case study
1789	M-O	Poor health, low dependency, low barriers score	Transcr./ analysed Case study
1803	F-O	Good health, low dependency, low barriers score	Analysed
1161	F-O	Poor health, low dependency, low barriers score	Transcr./ analysed
1287	F-Y	Good health, low dependency, low barriers score	Transcr./ analysed
1165	M-O	Poor health, low dependency, low barriers score	Analysed
427	F-Y	Poor health, low dependency, low barriers score	Analysed
1634	F-Y	Good health, low dependency, high barriers score	Analysed
1796	F-O	Poor health, high dependency, high barriers score	Analysed
24	F-O	Poor health, low dependency, low barriers score	Transcr./ analysed

1522	F-Y	Poor health, low dependency, low barriers score	Case study Analysed
503	F-Y	Poor health, low dependency, low barriers score	Transcr./ analysed
581	F-Y	Poor health, high dependency, high barriers score	Transcr./ analysed
1036	F-O	Poor health, high dependency, high barriers score	Analysed
286	F-O	Poor health, high dependency, high barriers score	Analysed
145	F-Y	Poor health, low dependency, low barriers score	Analysed
720	F-O	Poor health, high dependency, high barriers score	Analysed
1752	F-Y	Poor health, high dependency, high barriers score	Transcr./ analysed
610	F-O	Good health, low dependency, low barriers score	Analysed
849	M-Y	Poor health, low dependency, low barriers score	Analysed
1021	F-O	Good health, low dependency, low barriers score	Analysed

Notes: M- male, F- female, Y-younger participants group (75- 79 yrs), O- older participants group (80- 84 yrs)

Appendix 5. Examples of instruments for ENABLE-AGE data collection

Pētnieciskais projekts

ENABLE-AGE

(Autonomijas veicināšana, dalība, un labklājība lielā vecumā:
mājas vide kā veselīgas novecošanas priekšnoteikums.)

QLK6-CT-2001-00334

Aptauja T1

I. Vispārēja informācija

1. Dzimums

- ☐ Vīrietis
- ☐ Sieviete

2. Dzimšanas gads

3. Ģimenes stāvoklis

- ☐ Precējies, partneris dzīvo citur (piem. aprūpes namā)
- ☐ Neprecējies, bet ir ciešas attiecības ar neprecētu partneri
- ☐ Šķīries
- ☐ Atraitnis
- ☐ Neprecējies

II. Housing Enabler, aprakstošā daļa

1. Rajona tips

- ☐ Ļoti urbanizēts
- ☐ Urbanizēts
- ☐ Lauku

2. Mājokļa tips

- ☐ Daudzdzīvokļu blokmāja
- ☐ Ģimenes māja
- ☐ Dvīņumāja / 2-ģimeņu māja
- ☐ Cits

3. Dzīvoklis ir izvietots turpmāk nosauktajā stāvā: tas attiecas uz visiem mājokļa tipiem, izņemot ģimenes māju-skat. 4. jautājumu. Ir iespējama vairāk kā viena atbilde.

- ☐ Pagrabs
- ☐ Pamatstāvs
- ☐ Pusstāvs

- ☐ 1.stāvs
- ☐ 2. stāvs
- ☐ 3. stāvs
- ☐ Cits

4. Ģimenes mājas īpatnības:

- ☐ Vienstāva māja ar pagrabu
- ☐ Vienstāva māja bez pagraba
- ☐ 2 –stāvu māja ar pagrabu
- ☐ 2 – stāvu māja bez pagraba
- ☐ Cita

5. Daudzdzīvokļu blokmājas īpatnības:

- ☐ “Ierindas” izvietojuma dzīvokļi
- ☐ Dzīvokļi tikai pamatstāvā
- ☐ Ēka ar dzīvokļiem pamatstāvā un “ierindas” dzīvokļiem virs tiem
- ☐ Balkona pieeja blokam
- ☐ Pamatstāva dzīvoklis ar atsevišķām kāpnēm
- ☐ Terasveida vai rindu māja
- ☐ Cita

6. Mājokļa tips

- ☐ Parasts mājoklis
- ☐ Sociālā māja

16. Aptuvenais ēkas uzbūvēšanas gads:_____

17. Aptuvenais mājas pārbūves gads:_____

III. Demogrāfiskie dati

Izglītība

1. Kāda ir jūsu izglītība?

- ☐ Nav izglītības
- ☐ Nepabeigta pamatskolas izglītība
- ☐ Pamatskolas izglītība
- ☐ Vidējā/ vidējā profesionālā
- ☐ Ģimnāzija / koledža
- ☐ Augstskolas izglītība

Intervētājam: Ja respondents ir precējies/ šķīries / atraitnis, pajautāji : _____

2. Kāda ir jūsu dzīvesbiedra izglītība?

- ☐ Nav izglītības
- ☐ Nepabeigta pamatskolas izglītība
- ☐ Pamatskolas izglītība
- ☐ Vidējā/ vidējā profesionālā

- ☐ Ģimnāzija / koledža
☐ Augstskolas izglītība

Ienākumi

3. Visumā ņemot, cik apmierināts jūs esat ar saviem ienākumiem?

Ļoti neapmierināts					Ļoti apmierināts					
0	1	2	3	4	5	6	7	8	9	10

Objektīvās kategorijas

6. Lūdzu nosauciet, kādi apmēram ir jūsu ikmēneša netto ienākumi pēc nodokļu nomaksas, ieskaitot visus ienākumus un pensijas?

LATI	EURO
<input type="checkbox"/> 0- 27,99	<input type="checkbox"/> 0-49
<input type="checkbox"/> 28,00-55,99	<input type="checkbox"/> 50-99
<input type="checkbox"/> 56,00-83,99	<input type="checkbox"/> 100-149
<input type="checkbox"/> 84,00-101,99	<input type="checkbox"/> 150-199
<input type="checkbox"/> 102,00-129,99	<input type="checkbox"/> 200-249
<input type="checkbox"/> 130,00-157,99	<input type="checkbox"/> 250-299
<input type="checkbox"/> 158,00- 185,99	<input type="checkbox"/> 300-349
<input type="checkbox"/> 186,00-213,99	<input type="checkbox"/> 350-399
<input type="checkbox"/> 214,00-251,99	<input type="checkbox"/> 400-449
<input type="checkbox"/> 252,00-279,99	<input type="checkbox"/> 450-499
<input type="checkbox"/> Vairāk par 280Ls	<input type="checkbox"/> 500- un vairāk

7. Kā jūs vērtējat savus ienākumus kopumā?

- ☐ Mazi
☐ Vidēji
☐ Lieli

Ienākumu avots

8. Vai saņemat pensiju?

- ☐ Jā
☐ Nē

9a. Vai saņemat sociālo pabalstu?

- ☐ Jā
☐ Nē

9b. Ja jā, tad cik daudz mēnesī _____

10a. Vai saņemat mājokļa pabalstu?

- ☐ Jā
☐ Nē

10b. Ja jā, tad cik daudz mēnesī _____

11. Vai jums ir citi ienākumi?

- ☐ Jā
☐ Nē

11b. Ja jā, tad precizējiet (piem. , tūrisms, zemkopība, īres ienākumi, kapitāla ieguldījumi, alga) _____

Tautība

12. Lūdzu nosauciēt savu tautību?

- ☐ Latvietis
☐ Krievs
☐ Cita tautība _____

13. Kur Jūs esat dzīvojis mūža lielāko daļu?

- ☐ Latvijā
☐ Ārpus Latvijas

IV. Mājokļa labiekārtojuma novērtējums un mājokļa pielāgošana

1. Cik ilgi jūs dzīvojat šajā pilsētā? _____ gadus

2. Cik ilgi jūs dzīvojat šajā apkaimē? _____ gadus

3. Cik ilgi jūs dzīvojat savā patreizējā dzīvoklī/mājā? _____ gadus

4. Vai jūsu mājoklis ir

- ☐ Īrēts
☐ Pieder jums
☐ Cits variants

5. Kādi labiekārtojumi ir jūsu dzīvoklī/mājā?

- ☐ Centralizēta apkure mājai/ dzīvoklim
☐ Individuālā gāzes/elektriskā/šķidrā kurināmā apkure (bet nav centralizētas apkures)
☐ Tikai vietēja ogļu vai malkas apkure (nav centralizētas apkures)

6. Cik istabu jums ir? _____ (neskaitot virtuvi)

VI. Sūdzības par veselības stāvokli (Tibblin, Bengtsson, Furunes, & Lapidus, 1990)

Intervētāja apgalvojums: Vai kāds no nosauktajiem simptomiem ir uztraucis jūs pēdējo trīs mēnešu laikā? Atbildiet, lūdzu, ar "jā" vai "nē". Centieties, lūdzu, atbildēt arī tad, ja šaubāties.

	<i>Simptomi</i>	<i>Intervētājam: lūdzu atzīmējiet ar krustiņu</i>		
1	Reibonis	Jā	Nē	Iztrūkstošās atbildes iemesls
2	Redzes problēmas	Jā	Nē	
3	Traucēta (pavājināta) dzirde	Jā	Nē	
4	Galvassāpes	Jā	Nē	
5	Vispārējs nogurums	Jā	Nē	
6	Miega traucējumi	Jā	Nē	
7	Nervozitāte	Jā	Nē	
8	Svišana	Jā	Nē	
9	Elpas trūkums	Jā	Nē	
10	Sāpes krūšu kurvī	Jā	Nē	
11	Klepus	Jā	Nē	
12	Uzbudinājums	Jā	Nē	
13	Nogurdināmība	Jā	Nē	
14	Traucēta koncentrēšanās spēja	Jā	Nē	
15	Nemierīgums	Jā	Nē	
16	Depresija/nomāktība	Jā	Nē	
17	Raudulība	Jā	Nē	
18	Grūtības relaksēties/ atbrīvoties	Jā	Nē	
19	Sāpes vēderā	Jā	Nē	
20	Nelabums	Jā	Nē	
21	Caureja	Jā	Nē	
22	Vēdera aizcietējumi	Jā	Nē	
23	Anoreksija/ēstgribas zudums	Jā	Nē	
24	Svara zudums	Jā	Nē	
25	Palielināta ķermeņa masa	Jā	Nē	
26	Aukstuma sajūta	Jā	Nē	
27	Sāpes locītavās	Jā	Nē	
28	Muguras sāpes	Jā	Nē	
29	Sāpes kājās	Jā	Nē	
30	Urinācijas grūtības	Jā	Nē	

VII. Emocionālā labsajūta (© Positive and Negative Affect Schedule (PANAS) Watson, Clark, & Tellegen, 1988)

Intervētāja ievada komentārs: Nosauktie apgalvojumi attiecas uz dažādām sajūtām un emocijām. Es izlasīšu šos apgalvojumus skaļi, un jautāšu, cik bieži jums ir šāda emocionāla pieredze pēdējā gada laikā. Jūs varat izvēlēties kādu no atbildēm.

Jūs varat izvēlēties starp “nekad”, “reti”, “dažreiz”, “bieži”, “ļoti bieži”. Lūdzu, izvēlieties jūsu viedoklim atbilstošo kategoriju.

Cik bieži esat bijis _____ pēdējā gada laikā?

Nr.	Apgalvojums	Intervētājam: lūdzu atzīmējiet ar krustiņu					Iztrūkstošās atbildes iemesls
		nekad	reti	dažreiz	bieži	ļoti bieži	
1.	Ieinteresēts						
2.	Apbēdināts						
3.	Uztraukts						
4.	Sarūgtināts						
5.	Stiprs						
6.	Vainīgs						
7.	Izbijies						
8.	Naidīgs						
9.	Sajūsmināts						
10.	Lepns						
11.	Aizkaitināts						
12.	Modrs						
13.	Nokaunējies						
14.	Iedvesmas pilns						
15.	Saspringts						
16.	Apņēmīgs						
17.	Uzmanīgs						
18.	Nervozs (nemierīgs)						
19.	Aktīvs						
20.	Nobijies						

X. Aptauja – mājas nozīmīgums (Oswald, Mollenkopf, & Wahl, 1999)

Intervētāja ievada apgalvojums : Mājai, kurā cilvēks dzīvo, var būt dažādas nozīmes. Tā nav tikai vieta, kur norisinās ikdienas dzīve. Mājai var būt liela nozīme, vai cilvēks var darīt visu, ko vēlas. Tā var būt vieta, kur cilvēks jūtas droši un mājīgi, tāpat tā var cilvēku ierobežot.

Turpmāk nosauktie apgalvojumi skaidro dažādu mājas nozīmi. Es jums priekšā skaļi lasīšu apgalvojumus un, lūdzu, jūs novērtēt, cik lielā mērā jūs piekrītat vai nepiekrītat dotajam apgalvojumam šobrīd. Jūs varat izvēlēties kādu no šādām atbildēm.

Ja noteikti piekrītat apgalvojumam, izvēlieties skaitli 10. Ja noteikti nepiekrītat, izvēlieties skaitli 0. Ja nepiekrītat nevienam no galējiem vērtējumiem, izvēlieties skaitli, kas labāk raksturo jūsu viedokli.”

Katru apgalvojumu intervētājs iesāk ar frāzi: **“Atrasties mājās man nozīmē.....”**

Nr.	Apgalvojums	Atbilde 0-10	Iztrūkstošās atbildes iemesls
1.	Dzīvot labi projektētā vietā, kas atbilst manām vajadzībām		
2.	Tikt galā bez citu palīdzības		
3.	Būt pieradušam pie daudzām lietām mājās		
4.	Justies droši		
5.	Satīkties ar ģimeni, draugiem, paziņām		
6.	Dzīvot sliktos mājas apstākļos		
7.	Dzīvot istabā ar jauku skatu		
8.	Veikt ikdienas mājasdarbus		
9.	Būt nomāktam		
10.	Zināt dzīvokli kā savu kabatu		
11.	Dzīvot vietā, kur nav iespējams saņemt palīdzību no citiem		
12.	Dzīvot vietā, kas ir labi mēbelēta un gaumīgi iekārtota		
13.	Būt spējīgam mainīt vai pārkārtot lietas, ko vēlos		
14.	Spēt relaksēties		
15.	Sajust, ka dzīvoklis/ māja kļūst par nastu, apgrūtinājumu		
16.	Nebūt saistītam ar cita velmēm, tikai ar savīs paša velmēm		
17.	Domāt par pagātņi (atsaukt atmiņā svarīgas personas un notikumus)		
18.	Būt spējīgam priecāties par savu vientulību un iespēju būt neviena netraucētam		
19.	Būt izslēgtam no sabiedrības un sabiedriskās dzīves		
20.	Man pieder bāze, kuru es varu izmantot aktivitātēs		

21.	Nebūt spējīgam saglabāt/ uzturēt savu dzīves vidi		
22.	Plānot savu nākotni šajā vietā		
23.	Justies komfortabli un mājīgi		
24.	Būt spējīgam uzņemt viesus		
25.	Būt piesaistītam pie istabām un lietām mājās		
26.	Būt spējīgam darīt visu ko vēlos		
27.	Justies vientuļam		
28.	Būt labās attiecībās ar kaimiņiem		

XII. Subjektīvā veselība, mobilitāte, redze un dzirde (Sullivan & Karlsson, 1994)

1. Kā jūs visumā raksturotu savu veselības stāvokli?

Lielisks	Ļoti labs	Labs	Viduvējs	Slikts/vājš
1	2	3	4	5

XIII. Geriatriskā depresijas skala (Yesavage & Brink, 1983)

Intervētāja ievada apgalvojums: “Tālāk izteiktie apgalvojumi attiecas uz apmierinājuma aspektiem un sajūtām. Es izlasīšu šos jautājumus skaļi un lūgšu apliecināt, kā Jūs caurmērā jutāties pagājušās nedēļas laikā. Jūs, lūdzu, varat atbildēt ar jā vai nē.

Apgalvojums	Atzīmējiet ar krustiņu		
			Iztrūkstošās atbildes iemesls
1. Vai Jūs visumā esat apmierināts ar savu dzīvi?	Jā	Nē	
2. Vai ir zudušas daudzas Jūsu aktivitātes un intereses?	Jā	Nē	
3. Vai Jums liekas, ka Jūsu dzīve ir tukša?	Jā	Nē	
4. Vai Jūs bieži garlaicojaties?	Jā	Nē	
5. Vai Jums lielākoties ir labs garastāvoklis?	Jā	Nē	
6. Vai baidāties, ka kaut kas slikts ar Jums var notikt?	Jā	Nē	
7. Vai Jūs parasti jūtaties laimīgs?	Jā	Nē	
8. Vai Jūs bieži jūtaties bezpalīdzīgs?	Jā	Nē	
9. Vai Jums labāk patīk palikt mājās nekā izejt un uzsākt ko jaunu?	Jā	Nē	
10. Vai Jums šķiet, ka Jums ir lielākas problēmas ar atmiņu kā citiem?	Jā	Nē	
11. Vai domājat, ka ir brīnišķīgi dzīvot šajā brīdī?	Jā	Nē	
12. Vai Jums šķiet, ka Jūsu dzīve patreiz ir diezgan nevērtīga?	Jā	Nē	
13. Vai Jūs jūtaties enerģijas pilns?	Jā	Nē	
14. Vai Jums šķiet, ka Jūsu situācija ir bezcerīga?	Jā	Nē	
15. Vai Jums šķiet, ka lielākajam vairumam cilvēku klājas labāk kā Jums?	Jā	Nē	

XV. HOUSING ENABLER, vides novērtējums

A. ĀRĒJĀ VIDE	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
Vispārējā daļa																
1. Šauri gājēju celiņi (mazāk kā 130 cm).					3	3							3	3	1	Var atzīmēt, ja riteņbraucēju celiņš ir uz braucamās daļas, bet var salīdzināt ar A7.
2. Neregulāra staigāšanas virsma (t.sk. savienojumi, dubļainas daļas, utt.)		2	3		1	1	3						3	3		
3. Nestabila staigāšanas virsma (smiltis, māls, utt.)		2	3		3	3	2						3	4		
4. Takas virsmas klājums ir nelīdzens (šķirbas, caurumi dziļāki kā 5mm)		2	3		3	3	2						3	3		Mērījumi attiecas gan uz platumu, gan garumu.
5. Stāvs pacēlums (slīpums vairāk kā 1:20. Netiek ietvertas uzbrauktuves pieejas-tās novērtē B23)		2	3		2	2	3						3	3	1	
6. Ceļš ar kāpnēm (alternatīvs ceļš ar uzbrauktuvi tiek pieņemts kā norma).		2	3		3	3	3	1				1	3	4	1	
7. Nav taktilu zīmju par strauju līmeņa maiņu vai citiem šķēršļiem.		2	3													Var atzīmēt, ja brauc ar riteni pa ielu, bet var salīdzināt ar A1. Tas attiecas uz "bez brīdinājuma" vai "nejauši".
8. Augstas apmales (vairāk kā 40 mm).		1	1		3	3	3	1					3	4	2	
9. Apmāles beidzas ar vertikālu malu.		3	3		3	3		1					2	2		
10. Apmāles ar pārāk īsu malu, vērstu uz braucamo daļu (attiecas uz gājēju pāreju vai krustojumu uz ietves).		3	4													Attiecas uz grūtībām noteikt apmales malu.
11. Nepietiekoši drenētas ietves un ceļi.		2	2		3	2	1	2					3	3		
12. Nav margu pie slīpām gājēju virsmām.		1	1		4	3	4						1		1	
13. Nav atpūtas vietu vai pārāk tālu viena no otras.						3	3	4					3	2	2	Atzīmējiet šo punktu, ja atpūtas virsmas iztrūkst vai attālums starp tām ir > 10 m. Atzīmējiet garāko attālumu starp 6-10 m:
14. Slikts apgaismojums gar ietvēm.	1	2		3	2			1					3	3	1	Atzīmē vai novērtēšana notiek dienas gaismā, vai satumstot. Šis punkts attiecas uz pamatapgaismojumu; salīdziniet A15, kas attiecas uz "kur Jūs liekat savu kāju".
15. Slikti apgaismota staigāšanas virsma.		4														
16. Sarežģīta/neloģiska piekļūšana ieejai.	2	1	3				1						1	1		

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
<u>Autostāvvietas</u> 17. Šauras autostāvvietas (visas šaurākas kā 360 cm – vismaz vienai jābūt ar šādu platumu). Garāžas platums šaurāks kā 360 cm.					1	1							4	4	3	
18. Autostāvvietas tālu no ieejas.	4				1	1	4						1	1		Atzīmējiet, ja attālums ir > 50m. Atzīmējiet attālumu starp 25-50 m: _____
19. Pasažieru iekāpšanas vieta tālu no ieejas.		3	3				4						1	1		Atzīmējiet vai ir slēgta eja vai ir citas barjeras. Atzīmējiet šo punktu, ja pasažieru iekāpšanas zona ir > 100 m no ieejas. Atzīmējiet attālumu starp 10-100 m: _____
20. Neadekvāti izveidotas nojumes aizsardzībai no sliktiem laika apstākļiem izkāpšanas vietā.					1	1	3						3	3		
21. Nestabila staigāšanas virsma autostāvvietā (smiltis, māls, utt.).		1	1		3	3	3	4					3	3		
Punkti A22–A28 novērtējami tikai daudzdzīvokļu mājās: 22. Nav speciāla autostāvvietas cilvēkiem ar invaliditāti, vai pārāk tālu no ieejas.	3							3					3	3		Salīdziniet ar A18; šis punkts attiecas tikai uz marķētām vietām. Atzīmējiet šo punktu, ja autostāvvietas nav vai tā ir tālāk par 100 m. Atzīmējiet attālumu starp 10-100 m: _____
23. Nokļūšana pie ieejas ir iespējama šķērsojot dzīvu auto satiksmi.	3	3	3		1	1							1	1		
<u>Sēdvietas</u> 24. Nav/pāris sēdvietas (vajadzētu būt novietotām ik pēc 25 m pirmos 100 m, turpmāk vismaz ik pēc 100 m)					3	3	4						3		2	
25. Pārmērīgi zemas, augstas vai šauras sēdēšanas virsmas (augstums 45-50 cm.)					3	3	3						3	3	3	
26. Sēdvirsmas ar rupju virsmu.					3	3	1						3	3		
27. Ierobežota manevrēšanas iespēja ap sēdēšanas vietām (150 x 150 cm).													3	4		
28. Ainavā ievietotās sēdvietas traucē gājēju satiksmei		3	3										3	3		

CITAS IEZĪMES	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
29. Atkritumu savākšanas telpa/vads sasniedzams pārvarot kāpnes vai atrodas citā ēkas līmenī.		3	3		3	3		1					3	4		Atzīmējiet novietojumu un attālumu, un citus specifiskus apstākļus. Atzīmējiet, ja atšķirības starp līmeņiem ir > 25 mm. Atzīmējiet mērījumu starp 15-25 mm: _____
30. Pastkaste sasniedzama pārvarot kāpnes vai atrodas citā ēkas līmenī.		3	3		3	3		1					3	4		Atzīmējiet novietojumu un citus specifiskus apstākļus. Atzīm., ja starpība starp līmeņiem ir > 25 mm. Atzīmējiet mērījumu starp 15-25 mm: _____
31. Ir grūti aizsniegt atkritumu tvertni vai pastkasti (pārāk zemu vai pārāk augstu virs zemes, vai citas problēmas).					3	2	1		3	3	4		3	4	3	Attiecas uz objektu atvēršanas attālumu. Atzīmējiet ja prolēma attiecas uz atkritumu savākšanas vietu vai/un pastkasti. Atzīmējiet, ja attālums ir ārpus intervāla 75-140 cm. Atzīmējiet augstāko atrasto mērījumu starp 75-140 cm: _____
32. Ierobežota manevrēšanas vieta (mazāk kā 150 × 150 cm) pie atkritumu tvertnes vai pastkastes.													3	4		
33. Ir izvietoti objekti visā gājēju ceļa garumā. (zemāk kā 210 cm virs zemes).	1	3	4													
B. Ieeja Attiecas uz kāpnēm, uzbrauktuvēm, un liftiem ārpusē, tieši pirms ieejas, vai kāpņu telpā. Kāpnes tieši durvju atvērumā novērtējamas sadaļā C. ĀRĒJĀ VIDE. Atcerieties, ka atpūtas vietu svaigā gaisā novērtē zem atsevišķa virsraksta zemāk. Visi izmēri ir uzskaitīti.																Atzīmējiet vai ir alternatīvas ieejas un kura/ kuras tiek lietotas biežāk
Vispārējā daļa																
1. Šaurs durvju atvērums.													3	4	1	B1–B11 attiecas uz visām durvīm, sākot no ieejas durvīm līdz pat dzīvokļa durvīm, ietverot arī lifta durvis. Atzīmējiet, ja brīvais atvērums ir < 75 cm. Atzīmējiet visšaurāko durvju atvēruma mērījumu intervālā starp 75-90 cm: _____
2. Augsti sliekšņi un/vai kāpnes pirms ieejas (vairāk kā 25 mm).		3	3		3	3		1					3	4		Atzīmējiet, ja starpība starp līmeņiem ir > 25 mm. Atzīm. augstāko starpības līmeņa mērījumu intervālā starp 15-25 mm: _____
3. Sašaurināta manevrēšanas vieta pirms durvīm (maz. kā 150 × 150 cm, ārpusē un telpas iekšpusē. 70 cm galvenās ieejas atvērta durvju pusē, 50 cm pirms dzīvokļa durvīm).													3	4	1	Atcerieties starpību starp B3 un B5. Atzīmējiet, ja virsma ir nelidzena, nestabila utt.
4. Ierobežots durvju atvērums.		1	1										1	4	1	Attiecas, ja durvis paliek izvērztas kad tās tiek atvērtas/aizvērtas.
5. Nav līmeņa virsma ieejas durvju priekšā (mazāk kā 150x150 cm)													3	3		Atcerieties starpību starp B3 un B5.
6. Smagas durvis bez automātiskas atvēršanās					3	3	3		3		4		3	3	1	
7. Automātiski durvis atveras uz vienu pusi.	1	3	3													

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
8. Neatbilstošs stikla daļu veidojums.	1	3	3										1	1		
9. Atverot durvis, tās nepaliek atvērtas kādu brīdi/ ātri aizveras.	2	3	4		3	3	3						3	3	1	Atcerieties starpību starp B9 un B10.
10. Durvis nevar nostiprināt atvērtā pozīcijā (nepieciešams fiksējošs slēdzenes mehānisms)					3	2	3						3	3	1	
11. Sarežģīta/ neloģiska atvēršana.	4	1	3		3								1	1		Atzīmējiet, ja pie ieejas ir telefons, durvju kods utt., un to izvietojumu.
Kāpnes																
12. Vienīgais ceļš ir kāpnes (nav lifta/ uzbrauktuves).			3	3		3	3	3			1		3	4	1	
13. Pakāpieni ir ar šauru vai neregulāru dziļumu.	3	3	3		3	3	3						3		3	Atzīmējiet punktu, ja dziļums ir < 25 cm un ja ir neregulārs dziļums.
14. Ļoti augsts, ļoti zems un/ vai neregulārs augstums.		3	3		3	3	3						3		3	Atzīmējiet, ja augstums ir ārpus intervāla 15-17 cm, un ja tas ir neregulārs visu kāpņu garumā.
15. Pakāpieni ir ar snīptīšiem vai atvērta tipa.		1	1										3			
16. Nav margu (vajadzētu abās pusēs).	1	1	1		3	3	3						4			
17. Margas pārāk īsas (jāturpinās 30 cm pirms/ pēc kāpnēm, bez pārtraukumiem to virsmā).	1	1	1		1	1	1						2			Norma ir pieļaujama, ja <u>viena marga</u> turpinās pēc kāpņu beigām.
18. Margas ir pārāk augstas/ pārāk zemas.					1	1	1						1			Mēra no pakāpiena vidus. Atzīmējiet, ja margas ir 80 cm augsumā vai zemāk. Atzīmējiet mērījumu > 80 cm:
19. Nav taktilu norāžu pie visizplatītākajiem gājēju maršrutiem.		3	4													
20. Vizuāli vide novērš kāpņu lietotāja uzmanību no pakāpieniem.	1	3														
21. Dažādi ornamentu uz pakāpieniem var radīt maldīgu priekšstatu par pakāpiena malu.	1	3														Attiecas gan uz "vizuālā veida trūkumu", gan uz jau esošām problēmām.
22. Slikti apgaismota staigāšanas zona un/ vai margas		4														Atzīmējiet vai ir ierobežots laiks, pirms gaismas automātiski izslēdzas.

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
<u>Uzbrauktuves</u>																
23. Pārāk slīpas (vairāk kā 1:20).					3	3	3						3	3		
24. Garš braucamais ceļš bez atpūtas vietas.					3	3	3						3	3		Atzīm., ja atpūtas vietu nav vai attālums starp tām ir > 10 m. Atzīm. garāko attālumu starp 6-10 m: _____
25. Uzbrauktuves virsma varētu izraisīt slīdēšanu.					3	3							3	3		
26. Nav margu (nepieciešamas abās pusēs, bez pārtraukumiem).					3	3	3						3	3		
27. Pilnīgi vai daļēji iztrūkst aizsargājoši elementi, lai nenoslīdētu uz sāniem (malas < 5 cm vai zemāk tiek novērtētas kā iztrūkstošas).		3	3										3	3		
<u>Lifts</u>																
28. Lifts neapstājas ēkas stāva līmenī.		3	3		3	3	3						3	3		Lifta durvju platums tiek atzīmēts zemt B1.
29. Starp liftu un ēkas stāvu ir sprauga (vairāk kā 3 cm).	1	3	3		2	3	3						3	3		
30. Smagas durvis bez automātiskas atvēršanas					3	3	3	3	4				3	3	1	
31. Automātiskās vai virpuļdurvis.	1	3	3													
32. Durvis nepaliek atvērtā stāvoklī/ ātri aizveras	2	3	4		3	3	3						3	3	1	
33. Durvis nevar nostiprināt atvērtā pozīcijā (nepieciešams fiksējošs slēdzenes mehānisms)					3	2	3						3	3	1	
34. Lifts apstājas ļoti strauji.					1	1							1			
35. Liftā nav margu.					1	1	1						1			
36. Liftā nav sēdvietas.					3	1	2						3			
37. Šaurs lifts.													1	3	3	Atzīm., ja lifts ir šaurāks kā 110 x 140 cm. Visos pārējos gadījumos izmēriet un atzīmējiet to: _____
38. Neloģiski izveidota vadīšana un aparatūra.	3	3	3													

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
39. Kontrolierīces un aparatūra ir novietota pārāk augstu/ zemu (t.i. ārpus intervāla 85-10 cm)								2	3	1		1	2	4	1	
40. Vadīšana prasa labas rokas funkcijas.										3	4					
41. Nav audio signāla, kad lifts pienāk.	1	3	4			3						1	1	1		
42. Nav redzes signāla, kad lifts pienāk.				3		3						1	1	1		
43. Lifta signāls nenorāda lifta kustības virzienu.	3	3	4	3		3						1	1	1		
<u>Atpūtas vieta svaigā gaisā/ balkons</u>																<i>Attiecas uz visa veida verandām, balkoniem, terasēm. Ziemas dārzs bez izejas uz āru vai/un ar apkuri netiek ietverts šajā definīcijā.</i>
44. Šādas vietas nav.		1	1		1	1	1					1	2	2	1	
45. Šī vieta ir pārāk maza (garums/platums mazāk kā 150 cm).												3	4			
46. Šauras durvis												3	4	1		<i>Atzīmējiet, ja atvērums ir < 75 cm. Atzīmējiet visšaurākā atvēruma mērījumu intervālā starp 75-90 cm: _____</i>
47. Augsti sliekšņi/atšķirīgs to izvietojuma līmenis/kāpnes.		3	3		3	3	1					3	4			<i>Atzīmējiet, ja starpība ir > 25 mm. Atzīmējiet lielāko mērījumu starpību intervālā starp 15-25 mm: _____</i>
48. Spraugas grīdā (vairāk kā 5 mm).												3	3			
49. Slīpa pāreja no viena līmeņa uz citu (slīpums vairāk kā 1:12).					3	3	3					3	3			
<u>C. Iekšējā vide</u> Vispārējā daļa																<i>Atzīmējiet, ja iekšējās vides novērtēšana ir saistīta ar "nepieciešamo mājas funkciju" (īpašas kāpnes, durvju platums).</i>
1. Kāpnes/ sliekšņi/ istabas dažādos līmeņos/grīdā šķēršļi (vairāk kā 25 mm).		3	3		3	3	1					3	4			<i>Atzīmējiet, ja starpība ir > 25mm. Piezīmējiet augstāko līmeņu atšķirību intervālā starp 15- 25mm: _____</i>
2. Sarežģīts/ neloģisks visvairāk lietotais ceļš.	3	3	3			4						1	1			
3. Šauras ejas/ koridori saistībā ar ēkas dizainu.												3	4	1		<i>Atcerieties starpību starp C3 un C9. Atzīmējiet, ja eja ir < 110 cm. Atzīmējiet visšaurāko vietu mērījumā, intervālā starp 111- 160 cm: _____</i>
4. Šauras durvis.												4	4	1		<i>Atzīmējiet, ja atvērums ir <75 cm. Atzīmējiet visšaurāko vietu intervālā starp 75- 95 cm: _____</i>
5. Slidena staigāšanas virsma (higiēnas telpas novērtē atsevišķi).		3	3		3	3	1					3		1		

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
6. Biezs/valīgi austeris/mīksts grīdas segums.							1						1	3		
7. Nenostiprināti, mazi paklāji uz grīdas.					3	2	1						2	3		
8. Brīvi novietoti kabeli uz grīdas.					3	2	1						2	3		
9. Ierobežota manevrēšanas vieta attiecībā uz pārvietojamām mēbelēm. (mazāk kā 1.3 × 1.3 m).		2	3		3	3							3	4	1	Atcerieties starpību starp C3 un C9.
10. Ierobežota manevrēšanas vieta nepieciešamības gadījumā, lai apgriestos (mazāk kā 1.3 × 1.3 m).						2							3	4	1	
11. Neatbilstoši izveidota garderobe/ drēbju skapis.		1	1						3				2	3		
Kāpnes																
12. Kāpnes uz augstāvu, kurām ir nepieciešamās mājokļa funkcijas.		3	3		3	3	3				1		3	4	1	C12–C14 attiecas uz kāpnēm starp stāviem = lifta trūkums. Var būt atzīmēts vairāk kā viens punkts.
13. Kāpnes uz pagrabu, kurām ir nepieciešamās mājokļa funkcijas.		3	3		3	3	3				1		3	4	1	
14. Ir kāpnes, bet visas nepieciešamās mājokļa funkcijas ir novietotas pamatstāvā.		1	1		1	1	1				1		1	1	1	
15. Pakāpieni ar šauru vai nevienādu dziļumu.		3	3	3		3	3	3					3		3	Punktu atzīmē, ja dziļums ir <25 cm un ja tas ir neregulārs visu kāpņu garumā.
16. Loti augsts, ļoti zems un/ vai nevienāds pakāpiena augstums.		3	3		3	3	3						3		3	Punktu atzīmē, ja augstums ir ārpus 15- 17 cm robežām un, ja tas ir neregulārs visu kāpņu garumā.
17. Pakāpiens ar snīpīti/atvērtas kāpnes bez pacēluma.		1	1										3			
18. Nav margu (nepieciešamas abās pusēs).		1	1	1		3	3	3					4			
19. Margas pārāk īsas (jābūt 0,3m pirms/pēc kāpnēm, bez pārtraukuma vidū).		1	1	1		2	2	2					3			
20. Margas novietotas pārāk augstu/zemu (augstāk/ zemāk par 0,9 m).						3	3	3					4			Mērījumu veic pakāpiena viduspunktā. Punktu atzīmē, ja margas ir 80 cm vai zemākas. Pierakstiet mērījumu >80 cm:
21. Nav taktīlu zīmju visvairāk izmantotajā gājēju maršrutā.		3	4													
22. Vizuāli vide novērš uzmanību no kāpnēm.		3														
23. Dažādi ornamentu uz pakāpieniem rada maldīgu priekšstatu par pakāpiena malu.		1	3													Attiecas gan uz "vizuālā veida trūkumu", gan uz jau esošām problēmām.
24. Slikti apgaismota staigāšanas virsma un/vai margas.			4													

	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
	1	2														
<u>Virtuve, velas mazgātuvē, palīgvirtuve</u>																
<i>Attiecas uz mēbelēm un aprīkojumu utt. Pieejamība aizsniedzot/ieešana veļas mazgātuvē tiek novērtēta vispārējā daļā zem ĀRĒJĀS VIDES un pie C99.</i>																
25. Ierobežota manevrēšanas vieta ap lietām/noliktavas priekšmetiem (apkopes zona mazāka kā 120 cm to priekšā). Ierobežota vieta, jo mēbeles tiek novērtētas zem C9.		3	3		3	3	1		3				3	4	1	
26. Sienas skapji un plaukti novietoti pārlietu augstu.		3	3		4	3	3	2	4	3	4	3	3	4	3	Atzīmējiet punktu, ja zemākais plaukts ir augstāk kā 140 cm virs grīdas.
27. Nav atbilstošas darba virsmas sēdošam darbam (0.85 m ir domāts vienīgi stāvošam darbam; zemāks darba virsmas augstums domāts sēdošam darbam). Kāju novietojumu novērtē zem C29.					1		1						3	3	1	
28. Zema darba virsma (0.84 m vai zemāk).								3				3			1	
29. Nav darba virsmas arkāju novietojuma iespējām zem tās (maz. kā 0.65 m augstumā, dziļumā 0.6 m, platumā 0.8 m).					2		2						2	3	2	
30. Darba virsma pārlietu dziļa (vairāk kā 0.6 m).									3	1	4		3	3		
31. Pārāk dziļi plaukti (vairāk kā 0,3 m). Dziļāki plaukti prasa izvelkamus plauktus. <i>Atzīmējiet, ja puse grīdas un citi plaukti ir pārāk dziļi un trūkst šīs iespējas.</i>									4		4	3	3	3	1	
32. Parastie plīts riņķi.									3	2						Ietveriet gāzes plīti u.c.
33. Keramiskā plīts virsma.	1	3	4													
34. Durvju atvērums (iekšējās durvis), kas traucē pieejamību palīgtelpām.								1			4	4	1	4		
35. Ierobežots vai neatbilstošs izvietojuma apgaismojums virs darba virsmas, izlietnes, cepšanas, vārīšanas zonā.		3														
<i>Novērtējot kontrolierīces/aparatūru. Attiecīgie punkti ir atzīmēti, ja viena vai vairākas pastāvošas funkcijas virtuvē, veļas mazgātuvē rada problēmas. Ja ir mikroviļņu krāsns, to arī ietveriet.</i>																
36. Neloģiska kontrolslēdžu vadīšana.	4	2	3													
37. Nepieciešams liels spēks, lai iedarbinātu kontrolierīces.						3			1			3		1		

	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
	1	2	2													
38. Hiperjūtīga ieslēgšana.	3	3	3			3				1	1					
39. Lietojot nepieciešama saglabāta sūkās motorikas funkcija.	1					3				1			1			Attiecas uz sīko motoriku, sarežģītu manipulēšanu, salīdziniet C47.
40. Ļoti mazas kontrolierīces.		2	2							3	2					
41. Ļoti lielas kontrolierīces.										2	3					
42. Pagriešanas kustība ar visu plaukstu, ieskaitot pamatnes locītavu.										2	4					
43. Nepieciešama sarežģīta manevrēšana (vairāk nekā viena darbība/kustība) un ļoti precīzas kustības.	2		1			2				1	1		1			
44. Lietojot jāizmanto abas rokas.										1	4		3			
45. Lietojot jāizmanto rokas.										3	4		3			
46. Lietojot jāizmanto pēdas.					2								1	4		
47. Lietojot jāizmanto pirkstus (atsevišķs satvēriens, piem., pincetes un laterālais satvēriens).										2	4					
48. Vairāk kā puse kontrolierīču ļoti augstu/ nepieejamā novietojumā (> 1.2 m virs grīdas).								2	3	1			2	4	1	Attiecas uz elektrības ligzdām/ slēdžiem, rīkošanos ar trauku skapjiem un atvilkņiem utt.
49. Vairāk kā puse aparātūras/ kontrolierīces atrodas ļoti zemā stāvoklī (< 0.7 m virs grīdas).												1	1		1	Attiecas uz elektrības ligzdām/slēdžiem, rīkošanos ar trauku skapjiem un atvilkņiem utt.
Higiēnas telpas																
50. Nav vietas, lai apsēstos dušā vai vannā.					2							3	3	3	1	Manevrēšanas vieta tiek novērtēta zem C9 un/vai C10. Plānojot mērījumus atzīmējiet
51. Nav rokturu dušā/ vannā un/ vai tualetē		1	1		4	4	4					4	4	4	1	
52. Rokturi grūti sasniedzami (netiek ietverts augstums, bet atrašanās ārpus sasniegšanas robežām.).					1	1	1		3			1	1	1		Atzīmējiet starpību starp C52 un C55
53. Rokturi ļoti augstu, >90 cm														1		
54. Rokturi ļoti zemu, < 80 cm													1			

	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
	1	2	2													
55. Rokturi izvietoti neadekvāti.					1	2						2	1	1		Attiecas uz neatbilstošu izvietojumu, kas ietekmē piecelšanās spējas, piemēram, vertikāls novietojums.
56. Rokturi grūti satverami vai sakrīt ar rokas izmēru.						1			1	4			1	1		
57. Rokturu izvietojums ierobežo dažādu priekšmetu lietošanu vai kustības ap to.													4	4	1	
Kontrolierīces, aparātūra higiēnas telpās attiecas uz patstāvīgām iekārtām- krāni, skapīši. Veļas mazgājamā mašīna novietota higiēnas telpās tiek novērtēta zem "veļas mazgājamā istabā"																
58. Neloģiskas kontrolierīces.	4	2	3													
59. Nepieciešams liels spēks, lai ieslēgtu kontrolierīces.							3			1			3		1	
60. Hiperjutīga ieslēgšana.	3	3	3			3				1	1					
61. Lietojot nepieciešama saglabāta sūkās motorikas funkcija.	1					3				1			1			Attiecas uz sūkās kontrolierīcēm, sarežģītu manipulēšanu, salīdziniet ar C69.
62. Ļoti mazas kontrolierīces.		2	2							3	2					
63. Ļoti lielas kontrolierīces.										2	3					
64. Pagriešanas kustības ar visu plaukstu, pamatnes locītavu.										2	4					
65. Sarežģīta manevrēšana (vairāk kā viena kustība), tiek prasīta precizitāte.	2		1			2				1	1		1			
66. Lietojot jāizmanto abas rokas.										1	4		3			
67. Lietojot jāizmanto rokas.										3	4		3			
68. Lietojot jāizmanto pēdas.					2								1	4		
69. Lietojot jāizmanto pirkstus (atsevišķs satvēriens, pincetes un laterālais satvēriens).										2	4					
70. Vairāk kā puse aparātu un kontroles sistēmu ir ļoti augstu/nepieciejamā stāvoklī (vairāk kā 1.2 m virs grīdas).								2	3	1			2	4	1	

	A	B 1	B 2	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
71. Vairāk kā puse aparātu/kontroles sistēmu ir ļoti zemu/nepieejamā stāvoklī (mazāk kā 0.7 m virs grīdas).												1	1		1	
72. Izlietni var izmantot tikai stāvus (augšējā mala 0.81 m virs grīdas vai augstāk).							3							3		
73. Tualetes pods ar standarta augstumu (0.41 m apsēžoties) vai zemāka.												3	3	1		Atzīmējiet, vai tualete ir piestiprināta pie sienas.
74. Paaugstināts tualetes pods (0.42 m apsēžoties) vai augstāka.														1	1	Atzīmējiet punktu, ja poda augstums ir >0,41 m. Atzīmējiet tualetes poda augstumu:
75. Caurules, krāni rada sašaurinātu telpu zem izlietnes.														3		
76. Ierobežota kāju novietošana zem izlietnes (attālums līdz sienai mazāks kā 0,6 m, platums mazāks kā 0,8 m, sarežģīts izlietnes dizains).														3		Attiecas uz brīvo telpu; C75 var būt parādīts kopā ar C76.
77. Spoguļi var izmantot tikai stāvus (zemākā mala vairāk kā 0.9 m virs grīdas)							2							3		
78. Tualetes papīra turētājs nepieejamā stāvoklī (vairāk kā 0.4 m no tualetes, augstāk kā apmēram 0.8m virs grīdas, novietots pie sienas aiz tualetes poda, utt.).			1			1		1	2	1					1	
79. Trauku skapji, dvieļu turētāji, un citi izvietoti nepieejami (ieteicamais augstums 0,9–1,2 m virs grīdas).			1		1	1		1	2					3		
80. Duškabīne ar sliekšni/atšķirība starp līmeņiem vairāk kā 0 mm.					1							3	3	3		Atzīmējiet dušas izmērus, ūdens noteci utt.
81. Vanna dušas vietā.												2	3	4	1	Atzīmējiet vai vannas veids rada problēmas.
82. Slidena grīdas virsma.		3	3		3	3	1						3		1	
<u>Citas kontrolierīces un darbināma aparatūra</u> <i>Attiecas uz durvju un logu apdari, ligzdām, slēdžiem un citām funkcijām. Virtuvi un higiēnas telpas novērtē atsevišķi.</i>																
83. Neloģiska kontrolierīču vadīšana.	4	2	3													
84. Prasīta liela piepūle lai ieslēgtu vadīšanu.							3			1			3		1	
85. Hiperjūtīga ieslēgšana.	3	3	3			3				1	1					

	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
86. Lietojot nepieciešama saglabāta sīkās motorikas funkcija.	1				3				1			1				Attiecas uz sīkām kontrolierīcēm, sarežģītu manipulēšanu, salīdzina C95.
87. Ļoti mazas kontrolierīces.		2	2						3	2						
88. Ļoti lielas kontrolierīces.									2	3						
89. Pagriešanas kustība ar visu plaukstu.									2	4						Orģināls slēgšanas kloķis.
90. Sarežģīta manevrēšana (vairāk kā viena darbība/kustība), tiek prasīta precizitāte.	2		1		2				1	1		1				
91. Lietojot jāizmanto abas rokas.									1	4		3				
92. Lietojot jāizmanto rokas.									3	4		3				
93. Lietojot jāizmanto pēdas.				2								1	4			
94. Lietojot jāizmanto pirkstus (atsevišķs satvēriens, piem., pincetes un laterālais satvēriens).									2	4						Orģināls slēgšanas kloķis.
95. Vairāk kā puse aparātu/kontroles sistēmu novietotas ļoti augstu/ nepieejamā stāvoklī (vairāk kā 1,2 m virs grīdas).								2	3	1		2	4	1		
96. Vairāk kā puse aparātu/ kontroles sistēmu novietotas ļoti zemu (mazāk kā 0,7 m virs grīdas).											1	1		1		Arī sienas kontaktligzdas.
Papildus mājas ierīces																
<i>Pieejamība gājēju ceļos ārpusē ir novērtējama zem sadaļas ĀRĒJĀ VIDE. Pilnīgs iekšējais kāpņu posms novērtēts zem sadaļas C12–24. Ierakstiet turpmākās barjeras iekšējos ceļos zem sadaļas PIEZĪMES.</i>																
97. Nolikta telpas ir aizsniedzamas pārvarot kāpnes/sliekšņus vai atrodas citā līmenī (vairāk kā 25 mm).		3	3		3	3		1				3	4			Atzīmējiet punktu, ja atšķirība starp līmeņiem ir >25 mm. Atzīmējiet augstāko starpību starp līmeņiem robežās starp 15-25mm: _____
98. Neatbilstoša dizaina telpas (ieskaitot durvis)	1								2		1	3	3			
99. Veļas mazgātuve ir aizsniedzama vienīgi pārvarot kāpnes/sliekšņus vai atrodas citā līmenī (vairāk kā 25 mm).		3	3		3	3		1				3	4			Atzīmējiet punktu, ja atšķirība starp līmeņiem ir >25 mm. Atzīmējiet augstāko starpību starp līmeņiem robežās starp 15-25 mm: _____

	A	B	B	C	D	E	F	G	H	I	J	K	L	M	N	PIEZĪMES
100. Neatbilstoši izveidotas veļas mazgātuves durvis (platas, smagas, utt.). <i>Cita veida aprīkojums tiek novērtēts zem sadaļas C25–49.</i>		1	2													<i>Punktu atzīmējiet, ja ir kāds no šiem apstākļiem.</i> Atzīmējiet visšaurāko durvju atvēruma vietu intervālā starp 75-90 cm: _____
D. Komunikācija																
1. Nav telefona ar pastiprinātu signālu				4												
<i>Sekojošās vides barjeras tiek novērtētas daudz dzīvokļu mājās..</i>																
2. Neloģiskas zīmes/izkārtnes.	4	3														<input type="checkbox"/> Atzīmējiet ar krustu, ja zīmes un norādes vispār IZTRŪKST.
3. Abstraktas zīmes un izkārtnes.	4	3	3													
4. Zīmes un izkārtnes vāji apgaismotas, nepiemēroti izkārtas.	3	3	3					3						1	1	
5. Uz izkārtņēm mazi burti un cipari.	1	3														
6. Nav taktilu zīmju uz norādēm, utt.		1	4													

Sezona, kurā veikts novērtējums un laika apstākļi:

XVI. Ikdienas aktivitāšu kāpnes (Hulter Åsberg & Sonn, 1989; Sonn & Hulter Åsberg, 1991)

1. Ēšana		Nozīmē ēdiena paņemšanu no šķīvja vai cita trauka un ielikšanu mutē	Iztrūkstošās atbildes iemesls:
<input type="checkbox"/>	Neatkarīgs	Ēdat pats bez palīdzības	
<input type="checkbox"/>	Daļēji atkarīgs	Ēdat pats, izņemot, ja nepieciešama palīdzība, sagriežot gaļu vai smērējot sviestu uz maizes	
<input type="checkbox"/>	Atkarīgs	Saņem palīdzību, ēdot vai tiekat daļēji vai pilnīgi barots caur zondi, vai ar intravenozu šķidrumu	
2. Pārvietošanās		Nozīmē iekāpt vai izkāpt no gultas un apsēsties vai piecelties no krēsla	Iztrūkstošās atbildes iemesls:
	Neatkarīgs	Iekāpjat vai izkāpjat no gultas un apsēžaties vai pieceļaties no krēsla bez palīdzības, (var lietot atbalsta objektus, tādus kā spieķis vai staigāšanas rāmis)	
	Daļēji atkarīgs	Iekāpjat gultā vai izkāpjat no tās vai apsēžaties krēslā un pieceļaties no tā ar palīdzību	
	Atkarīgs	Nevarat izkāpt no gultas	
3. Aiziet uz tualetes telpu		Nozīmē iešanu uz tualetes telpu, lai iztukšotu urīnpūsli vai zarnu traktu, sevis notīrīšanu un apģērba sakārtošanu	Iztrūkstošās atbildes iemesls:
	Neatkarīgs	Aizejat līdz tualetei, notīriet sevi un sakārtojat apģērbu bez palīdzības, (var lietot spieķi vai staigāšanas rāmi, vai ritenkrēslu, un var lietot naktspodu/ šīberi, iztukšojot to no rīta)	
	Daļēji atkarīgs	Saņem palīdzību, lai aizietu uz tualeti, notīrītu sevi, sakārtotu apģērbu, lai lietotu naktspodu	
	Atkarīgs	Neejat uz tualetes telpu	
4. Ģērbšanās		Nozīmē visu nepieciešamo drēbju izņemšanu no skapja vai atvilkņēm un apģērbšanos, ietverot slēdžu, jostu savilkšanu, sprādžu aiztaisīšanu	Iztrūkstošās atbildes iemesls:
	Neatkarīgs	Paņem drēbes un pilnībā apģērbjaties bez palīdzības	
	Daļēji atkarīgs	Paņem drēbes un apģērbjaties bez palīdzības, izņemot kurpju aizšņorēšanu	
	Atkarīgs	Saņem palīdzību, lai paņemtu drēbes un apģērbtos, vai paliekat daļēji vai nepilnīgi apģērbies	
5. Mazgāšanās		Nozīmē dušas sūkļa lietošanu, vannas vai dušas lietošanu	Iztrūkstošās atbildes iemesls:
	Neatkarīgs	Nesaņem palīdzību (pats iekāpjat un izkāpjat no vannas vai dušas)	
	Daļēji atkarīgs	Saņem palīdzību tikai vienas ķermeņa daļas mazgāšanā (kā, piemēram, mugura vai kājas)	

	Atkarīgs	Saņemot palīdzību vairāk nekā vienas ķermeņa daļas mazgāšanā (vai arī pats nemazgājas).	īemesls:
6.Maltītes gatavošana		Aiziet līdz virtuvei, gatavot maltīti, rīkoties ar plīti	Iztrūkstošās atbildes īemesls:
	Neatkarīgs	Veicat aktivitāti, kad nepieciešams	
	Daļēji atkarīgs	Negatavoja ēdienu vai tikai uzsildāt jau sagatavotu maltīti	
	Atkarīgs	Neveicat šo aktivitāti	
7. Sabiedriskā transporta lietošana		Tiekat līdz sabiedriskā transporta pieturai, varat iekāpt un izkāpt no tramvaja, trolejbusa , autobusa un vilciena	Iztrūkstošās atbildes īemesls:
	Neatkarīgs	Lietoja sabiedrisko transportu, kad nepieciešams	
	Daļēji atkarīgs	Lietoja sabiedrisko transportu, bet tikai citas personas pavadībā	
	Atkarīgs	Nevarat nokļūt līdz sabiedriskā transporta pieturai, vai vajag citas personas palīdzību iekāpšanai un izkāpšanai	
8. Iepirkšanās		Nokļūt veikalā, pārvietoties pa kāpnēm vai citiem šķēršļiem, izvēlēties pirkumus, samaksāt par tiem un nogādāt tos mājās	Iztrūkstošās atbildes īemesls:
	Neatkarīgs	Veicat šo aktivitāti, kad nepieciešams	
	Daļēji atkarīgs	Veicat šo aktivitāti, bet kopā ar kādu citu personu	
	Atkarīgs	Neveicat šo aktivitāti, vai nepieciešama palīdzība atsevišķu aktivitāšu daļu veikšanai	
9.Mājas uzkopšana		Veikt mājas tīrīšanu, tīrīšanu ar putekļu sūcēju, grīdu mazgāšanu	Iztrūkstošās atbildes īemesls:
	Neatkarīgs	Veicat šo aktivitāti, kad nepieciešams	
	Daļēji atkarīgs	Saņemot palīdzību, iznesot ārā paklājus vai asistēšana nepieciešama ļoti reti	
	Atkarīgs	Neveicat aktivitāti, vai nepieciešama regulāra asistēšana atsevišķās aktivitāšu daļās	

Ikdienas aktivitāšu veikšanas grūtības

Intervētāja ievada apgalvojums: “Vai izjūtat kādas grūtības aktivitātes veikšanā, pat tad, ja visu veicat patstāvīgi?”

		Ne-atkarīgs	Ar grūtībām		Iztrūkstošās atbildes iemesls
			Jā	Nē	
1a	Ēšana <i>Nozīmē ēdiena paņemšanu no šķīvja vai cita trauka un ielikšanu mutē</i>		Jā	Nē	
2a	Pārvietošanās <i>Nozīmē iekāpt vai izkāpt no gultas un apsēsties vai piecelties no krēsla</i>		Jā	Nē	
3a	Tualetes lietošana <i>Nozīmē iešanu uz tualetes telpu, lai iztukšotu urīnpūsli vai zarnu traktu, sevis notīrīšanu un apģērba sakārtošanu</i>		Jā	Nē	
4a	Ģērbšanās <i>Nozīmē visu nepieciešamo drēbju izņemšanu no skapja vai atvilknēm un apģērbšanos, ietverot slēdžu, jostu savilkšanu, sprādžu aiztaisīšanu</i>		Jā	Nē	
5a	Mazgāšanās <i>Nozīmē dušas sūkļa lietošanu, vannas vai dušas lietošanu</i>		Jā	Nē	
6a	Ēdiena gatavošana <i>Aiziet līdz virtuvei, gatavot maltīti, rīkoties ar gāzes plīti.</i>		Jā	Nē	
7a	Sabiedriskā transporta lietošana <i>Tiekat līdz sabiedriskā transporta pieturai, varat iekāpt un izkāpt no tramvaja, trolejbusa un autobusa</i>		Jā	Nē	
8a	Iepirkšanās <i>Noklūt veikalā, pārvietoties pa kāpnēm vai citiem šķēršļiem, izvēlēties pirkumus, samaksāt par tiem un nogādāt tos mājās</i>		Jā	Nē	
9a	Mājas uzkopšana <i>Veikt mājas tīrīšanu, tīrīšanu ar putekļu sūcēju, grīdu mazgāšanu</i>		Jā	Nē	

XVI. Dzīves apmierinātība

1. Visā visumā, cik apmierināts/a Jūs esat ar savu dzīvi?

Ļoti neapmierināts					Ļoti apmierināts					
0	1	2	3	4	5	6	7	8	9	10

XVIII Subjektīvā funkcionālā neatkarība (Oswald et al., 2001)

1. Visumā ņemot, kā Jūs vērtējat savu neatkarību, tas ir, spēju tikt galā ar ikdienas aktivitātēm?

Pilnīgi atkarīgs					Pilnīgi neatkarīgs					
0	1	2	3	4	5	6	7	8	9	10

XIX. Aptauja par psiholoģisko labsajūtu (Ryff, 1989)

Intervētāja ievada apgalvojums:

“Izmantojot tālāk nosauktos apgalvojumus, es vēlos uzzināt, kā jūs izjūtat sevi un savu dzīvi. Es skaļi lasīšu apgalvojumus un lūgšu jums novērtēt, kādā apjomā jūs personīgi piekrītat vai nepiekrītat katram apgalvojumam. Jūs varat izvēlēties starp “pilnīgi nepiekrītu”, “nepiekrītu”, “neitrāli”, “piekrītu”, “pilnīgi piekrītu”. Lūdzu, izvēlieties to kategoriju, kas vislabāk atbilst jūsu viedoklim.

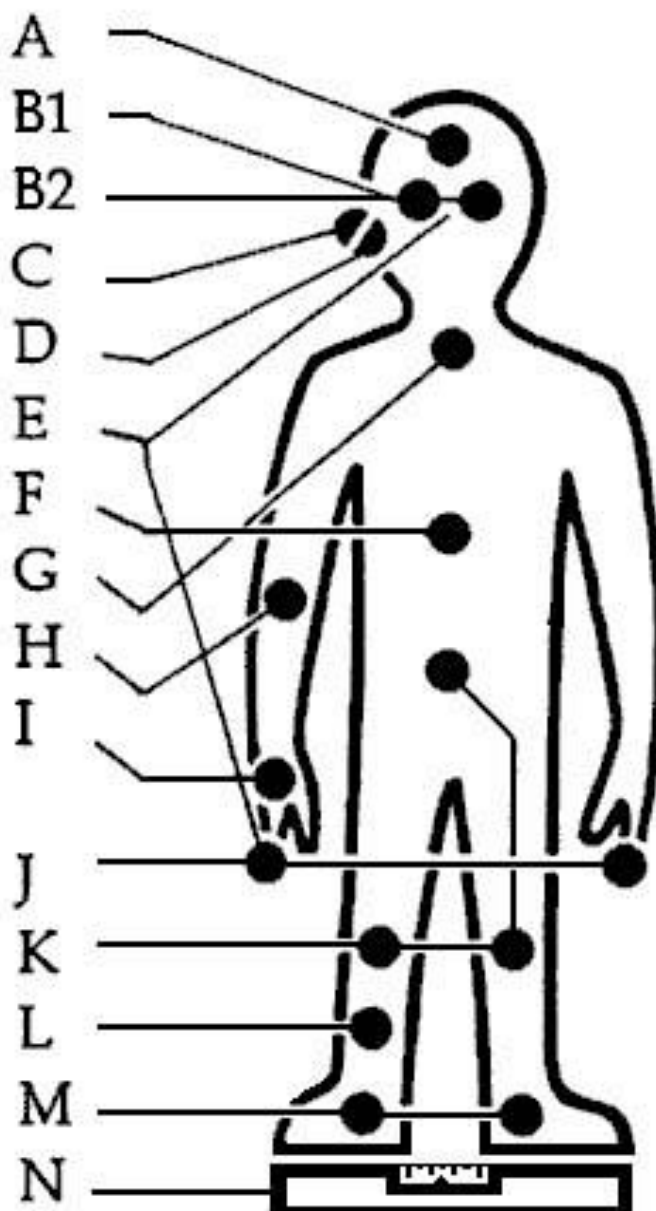
No	Apgalvojums	Intervētājam: lūdzu atzīmējiet ar krustiņu					
							Iztrūksto- šās atbildes iemesls
1	Es nebaidos izteikt savu viedokli, pat, ja tas ir pretējs vairāku cilvēku viedoklim.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
2	Visumā es jūtu, ka labi pārzinu un pārvaldu situāciju, kurā dzīvoju.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
3	Es dzīvoju dzīvi vienai dienai un īsti nedomāju par nākotni.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
4	Manus lēmumus parasti neietekmē tas, ko citi dara.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
5	Ikdienas dzīves prasības bieži mani nomāc.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
6	Es koncentrējos uz tagadni, jo domāju, ka man sagādās problēmas.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
7	Man ir nosliece uztraukties par to, ko citi cilvēki domā par mani.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
8	Es neiederos savā apkārtnē sabiedrībā un vidē.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	

9	Manas ikdienas aktivitātes man šķiet banālas un maznozīmīgas.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
10	Būt laimīgam, apmierinātam ar sevi, man ir daudz svarīgāk nekā gūt atzinību no citiem.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
11	Es diezgan labi tieku galā ar daudziem savas ikdienas dzīves pienākumiem.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
12	Es īsti nezinu, ko vēlos paveikt savā dzīvē.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
13	Mani ietekmē cilvēki ar spēcīgu viedokli	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
14	Es bieži jūtos pienākumu pārņemts.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
15	Es biju pieradis izvirzīt sev mērķus, bet tagad man tā liekas laika izšķiešana.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
16	Es esmu pārliecināts par savu viedokli, pat ja tas ir pretstatā vispārējiem pieņēmumiem	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
17	Visumā es labi tieku galā ar savām finansēm un darījumiem.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
18	Man patīk veidot nākotnes plānus un strādāt pie to realizācijas.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
19	Man ir grūti izteikt savu viedokli strīdīgos gadījumos.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
20	Es labi izplānoju savu laiku, tāpēc varu izdarīt visu, kas nepieciešams.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
21	Es esmu aktīva persona, realizējot plānus ko pats esmu nospraudis.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
22	Es bieži mainu savas domas par izvēli, ja mani draugi vai ģimene tam nepiekrīt.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
23	Man ir grūti veidot savu dzīvi tā, lai es būtu apmierināts ar to.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
24	Daži cilvēki bezmērķīgi klīst pa dzīvi, bet es tāds neesmu.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
25	Es pats nosaku, kas ir svarīgi, nevis spriežu pēc citu domām.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
26	Es esmu spējis sev izveidot māju un dzīvesveidu pēc saviem priekšstatiem.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	
27	Dažkārt jūtos tā, it kā būtu paveicis visu, kas dzīve bija jāizdara.	Pilnīgi nepiekrītu	Nepiekrītu	Neitrāls	Piekrītu	Pilnīgi piekrītu	

XXI. The Housing Enabler, Funkcionālie ierobežojumi un atkarība no pārvietošanās palīgierīcēm (Iwarsson & Slaug, 2001)

Intervētājam: Šī ir intervija, kas kombinēta ar novērošanu. Sekojot norādījumiem aprakstā, atzīmējiet burtu/burtus, kas norāda personas funkcionālos ierobežojumus.

- A** INFORMĀCIJAS
INTERPRETĒŠANAS
GRŪTĪBAS
- B1** SMAGS REDZES BOJĀJUMS
- B2** PILNĪGS REDZES ZUDUMS
- C** SMAGS DZIRDES BOJĀJUMS
- D** LĪDZSVARA TRAUCĒJUMI
- E** KOORDINĀCIJAS
TRAUCĒJUMI
- F** IZTURĪBAS IEROBEŽOJUMI
- G** GRŪTĪBAS VEIKT KUSTĪBAS
AR GALVU
- H** GRŪTĪBAS AIZSNIEGTIES AR
ROKU PALĪDZĪBU
- I** GRŪTĪBAS PLAUKSTAS UN
PIRKSTU FUNKCIJAS
IZMANTOŠANĀ
- J** AUGŠĒJO EKSTREMITĀŠU
PRASMJU ZUDUMS
- K** GRŪTĪBAS PIELIEKTIES UN
PIETUPTIES
- L** ATKARĪBA NO STAIGĀŠANAS
PALĪGIERĪCĒM
- M** ATKARĪBA NO RITENKRĒSLA
- N** PĀRMĒRĪGAS AUGUMA UN
SVARA IZMAIŅAS



XXII. Pielietojamība manās mājās (Fänge, 1999)

1. Cik piemērots ir Jūsu mājas vides plānojums, lai Jūs normāli varētu veikt savas personīgās higiēnas procedūras, apģērbtos, lietotu tualeti, paēstu? (Ja Jūs nespējat veikt kaut vienu no minētā, tad izsvītrojiet visu jautājumu)

1	2	3	4	5
Nepiemērots		Ļoti piemērots		

2. Cik piemērots ir Jūsu mājas vides plānojums, lai Jūs normāli varētu pagatavot/ uzsildīt maltīti vai pagatavot uzkožamos? (Ja Jūs nespējat veikt kaut vienu no minētā, tad izsvītrojiet visu jautājumu)

1	2	3	4	5
Nepiemērots		Ļoti piemērots		

3. Cik piemērots ir Jūsu mājas vides plānojums, lai Jūs varētu mazgāt traukus, tīrīt māju, rūpēties par puķēm? (Ja Jūs nespējat veikt kaut vienu no minētā, tad izsvītrojiet visu jautājumu)

1	2	3	4	5
Neatbilstošs		Ļoti atbilstošs		

4. Cik piemērots ir Jūsu mājas vides plānojums, lai varētu veikt veļas mazgāšanu, gludināšanu, drēbju sakārtošanu? (Ja Jūs nespējat veikt kaut vienu no minētā, tad izsvītrojiet visu jautājumu)

1	2	3	4	5
Neatbilstošs		Ļoti atbilstošs		

5. Cik droši Jūs jūtaties savā mājas vidē?

1	2	3	4	5
Nedroši		Pilnīgi droši		

6. Cik piemērots ir Jūsu mājas vides plānojums, kas ļauj Jums pabūt vienatnē, ja Jūs to vēlaties?

1	2	3	4	5
Nav piemērots		Tik, cik to vēlos		

7. **Cik piemērots ir Jūsu mājas vides plānojums, lai saietos ar draugiem vai paziņām ar kuriem jūs vēlaties satikties?**

1	2	3	4	5
Nav piemērots			Tik, cik to vēlos	

8. **Cik piemērots ir Jūsu mājas vides plānojums, lai Jūs spētu realizēt savu hobijs/brīvā laika aktivitātes un atpūsties?**

1	2	3	4	5
Nav piemērots			Tik, cik to vēlos	

9. **Ja Jūsu veselība mainīsies, cik lielā mērā būs iespējams veikt vienkāršas izmaiņas Jūsu mājas vidē (pārveidot autostāvvietu, pārveidot tualeti, pārkārtot mēbeles, pārkārtot citu istabu kā guļamistabu, utt.)?**

1	2	3	4	5
Nav iespējams			Tik, cik to vēlos	

10. **Cik pieejama, Jūsaprāt, ir mājas vide kopumā?**

1	2	3	4	5
Nepieejama			Pilnībā pieejama	

11. **Cik pieejama „Jūsaprāt, ir fiziskā vide ārpus Jūsu mājas (ceļi uz Jūsu lietoto autostāvvietu/garāžu, atkritumu savākšanas vietu, uz pastkastīti, uz koplietošanas veļas mazgātavu, uz mantu glabātavu, utt.)?**

1	2	3	4	5
Nepieejama			Pilnībā pieejama	

12. **Cik pieejama, Jūsaprāt, ir ieeja Jūsu mājā?**

1	2	3	4	5
Nepieejama			Pilnībā pieejama	

13. **Cik pieejamas „Jūsaprāt, ir palīgtelpas Jūsu mājās?**

1	2	3	4	5
Nepieejama			Pilnībā pieejama	

14. **Vai zīmes un uzraksti ārpus ēkas un pie ieejas ir labi izlasāmi un saprotami? (jautājums attiecas uz daudzdzīvokļu mājās dzīvojošiem).**

1	2	3	4	5
Nē			Viegli	

15. Cik pieejams Jūsaprāt ir balkons, iekšējais pagalms vai dārzs? (Ja Jums nav balkona, iekšējā pagalma vai dārza izsvītrojiet visu jautājumu.)

1	2	3	4	5
Nav pieejams			Ļoti pieejams	

16. Cik pieejama, Jūsaprāt, ir mājas iekšējā vide ?

1	2	3	4	5
Nav pieejama			Ļoti pieejama	

XXIII. Dzīves apstākļu nosacījumi (HOOP pielāgotā versija, Sixsmith & Sixsmith, 2000.)

Intervētāja paskaidrojums: Tagad es Jums pajautāšu vēl dažus jautājumus par Jūsu mājām. Jums jāatbild uz jautājumiem, izvēloties šādus iespējamus atbilžu variantus. Parādiet respondentam skalu (skat. pielikumu) un izskaidrojiet alternatīvas.

No	Jautājums	Intervētājs: atzīmējiet ar krustiņu					
		Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	Iztrūkstošās atbildes iespējas
1.	Vai Jūs esat apmierināts ar savas mājas stāvokli (plānojumu, jumtu, griestiem, sienām, mitrumu u.c.)?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
2.	Vai Jūs esat apmierināts ar elektrības, gāzes, ūdens, kanalizācijas u.c. piegādi?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
3.	Vai Jūsu māja ir tik silta, cik Jūs gribētu?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
4.	Vai Jūsu mājas plānojums ir ērts un piemērots Jums (dekorācijas, mēbeles)?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
5.	Vai Jūs varat parūpēties par mājas apsaimniekošanu (dārzkopību, tīrīšanu, uzturēšanu, veikt mazsvarīgākus labošanas darbus u.c.)?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
6.	Vai Jūs domājat, ka Jūsu mājā nav nedrošas vietas kas var izraisīt nelaimes gadījumus (ugunsgrēks, sliktis apgaismojums, slīdoši paklāji)?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
7.	Vai Jūs brīvi varat pieņemt lēmumus kā rīkoties savā mājā?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
8.	Vai Jums šķiet, ka Jūsu māja būs piemērota Jums, ja kaut kas mainīsies (piemēram, pasliktināsies veselība, samazināsies ienākumi, mazākas iespējas saņemt palīdzību)?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	
9.	Vai aiziešana no šīs mājas Jums būtu liels sarūgtinājums?	Noteikti jā	Dažkārt jā	Nē	Dažkārt nē	Noteikti nē	

XXIV. Kontrole pār dzīvojamo vidi (HCQ) © (Oswald, Wahl, Martin, & Mollenkopf, in press)

Intervētāja ievada komentārs: „Sekojošie apgalvojumi apraksta, kā cilvēki tiek galā ar uzdevumiem vai mijiedarbojas ar vidi. Es jums priekšā skaļi lasīšu izteikumus (apgalvojumus) un lūdzu Jūs novērtēt, cik lielā mērā Jūs piekrītat vai nepiekrītat dotajam apgalvojumam. Jūs varat izvēlēties kādu no sekojošajām atbildēm. Jūs varat izvēlēties starp „pilnīgi nepiekrītu”, “nepiekrītu”, “neitrāli”- tas ir, ka apgalvojumam Jūs varat daļēji piekrist un daļēji nepiekrīst un “piekrītu”, “pilnīgi piekrītu”. Lūdzu izvēlaties atbildes variantu, kurš visvairāk ir piemērots Jums.

Nr.	Apgalvojumi	Intervētajam: lūdzu, atzīmējiet ar krustiņu					
		Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	Iztrūkstošās atbildes iemesls
1.	Es esmu spējīgs iekārtot savu dzīvokli atbilstoši manai personiskajai gaumei un idejām	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
2.	Es priecājos par citu ieteikumiem, kas palīdz uzlabot manu dzīvokli/māju	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
3.	Atrasties labā vietā ir <u>veiksme</u> . Tu nevari to ietekmēt; tev vienkārši tā jāpieņem.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
4.	Tikai no manis ir atkarīgs tas, vai es izmantošu vai nē, tuvumā esošos aprūpes dienestus un sabiedrības pakalpojumus, kas varētu padarīt manu dzīvi vieglāku.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
5.	Tas, vai es būšu spējīgs palikt savā dzīvoklī/mājā, iespējams ir atkarīgs no citām personām	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
6.	Tas ir tikai <u>veiksmes</u> jautājums vai mani kaimiņi man palīdzēs trauksmes gadījumā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
7.	Manā dzīvoklī/mājā viss ir tā, kā tam ir jābūt. <u>Mani neuztrauc</u> , ko citi domā	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
8.	Darot kaut ko interesantu vai jauku ārpus mana dzīvokļa/mājas, man vajag uzticēties <u>citiem</u> .	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
9.	No <u>veiksmes</u> apstākļiem ir atkarīgs vai es varēšu vai nevarēšu palikt savā dzīvoklī/mājā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
10.	Tikai no manis ir atkarīgs interesēties par jaunām attīstības tendencēm saistībā ar atbilstoši vecumam draudzīgām mājām un mājas iekārtojuma.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
11.	Es jūtos atkarīgs no <u>citiem</u> , kad izmantoju atbalsta centrus un sabiedrības atbalstu manā dzīvojamā vietā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
12.	Tu vari dzīvot tikai tā, kā dzīvo pārējie tavā dzīvoklī/mājā; tu nevari neko ar to izdarīt.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
13.	Tikai no manis ir atkarīgs, vai es apmeklēju vai neapmeklēju kultūras pasākumus manā tuvākajā apkārtnē, vai arī apmeklēju skaistas vietas kaimiņos esošā apkārtnē.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	

14.	Ja <u>citas personas</u> piedāvā man palīdzēt (t.i., mājas uzturēšanu) iekšā vai ārpus mana dzīvokļa/mājas, es nevaru atteikties.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
15.	<u>Gadījums</u> lielā mērā nosaka to, kur un kā es dzīvoju.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
16.	<u>Es nevarētu</u> mainīt vidi, kurā dzīvoju, citu vajadzībām.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
17.	<u>Citi</u> man norāda uz to, kā iekārtot manu dzīvokli/māju.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
18.	Tas ir <u>veiksmes</u> jautājums, vai man būs vai nebūs iespēja turpināt dzīvot šajā dzīvoklī/mājā ierastajā veidā arī turpmāk.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
19.	<u>Tikai no manis</u> ir atkarīgs, kas man palīdzēs manā dzīvoklī/mājā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
20.	Es ieklausos <u>citu</u> ieteikumos, ja viņi man saka neko nemainīt manā dzīvoklī/mājā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
21.	Tas kādā veida mans dzīvoklis/māja ir veidots, lielākā vai mazākā mērā ir atkarīgs no tā, <u>kāda</u> šis dzīvoklis/māja <u>bija</u> gadu laikā.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
22.	Es neesmu gatavs pamest savus dzīvesvietas kontaktus pārceļoties.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
23.	<u>Citi cilvēki</u> ir atbildīgi par to, ja mans dzīvoklis/māja nav tā vieta, kurā es varu baudīt dzīvi.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	
24.	Tā ir <u>veiksme</u> , vai manā vidē ir sabiedrības atbalsts un atbalsta pakalpojumi.	Pilnīgi Nepiekrītu	Nepiekrītu	Neitrāli	Piekrītu	Pilnīgi Piekrītu	