A study of old people who in spite of frailty are coping successfully with changes in their daily life. Factors and competencies which help them to manage their situation.

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Abstract

Through the concepts of successful ageing and occupational science, the aim of this work is to gain a deeper understanding of factors related to frail older people successfully mastering changes in their daily lives. A sample of 85-year-old people from a Danish population study, have been interviewed in their homes by an occupational therapist. Out of 187 frail participants, 91 expressed satisfaction in everyday life despite limited mobility and loss of daily activities. A mixed methodology has been chosen, using quantitative and qualitative strategies in analysing the data. Analyses do not aim at finding cause-effect relationships, but search for patterns and differences in the ways changes are mastered.

A review of studies on ageing successfully including ageing with frailty is conducted. Many of the findings link well-being with being active; engaged in life; and having a sense of purpose, but some question the need for being active in very old age.

In this study, individual differences in handling the situation was seen and a complexity when strains reinforced one another. The satisfied frail 85-year-old participants managed their situation by using as well adaptive competencies as by upholding everyday occupation. Many had become slower or had limited strengths, but strived to manage independently. It is discussed if the value of autonomy is stronger than the need for active participation in important activities. Strong relation is found between satisfaction in everyday life and adaptive competencies, which included learning, and preventive intervention is proposed.

Furthermore it is recommended, when offering support to frail old people, to pay attention to the value of upholding a daily structure through balanced occupational challenges and control. The survey is not representative for older people in general, but offers a glimpse of how everyday life changes and how some 85-year-old people master the process of ageing with frailty.

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Introduction

The ageing society.

All over the world, societies are concerned about the demographic change with a growing number of older people in the population. In their search for models for an 'ageing society' Schroll, Kirk, et al. (1998) demonstrated that old people, especially those at the age of 80 and above, are the group of citizens that are significantly the most frequent users of healthcare and social services.

The National Statistic Registry in Denmark (Statistics Denmark, StatBank.dk) predicts that the numbers of +80 years old citizens' (208.000) will be almost doubled in the year 2040 (404.000). Recently, four hearings about the ageing society in Denmark were held with experts and 20 members of the Danish Parliament (Teknologirådet 2002). The main conclusions underline the fact, that old people live longer and stay 'young' longer. Important factors of ageing successfully are *health*, *lifestyle*, and *living conditions*. They also point to the risk of an increasing polarisation in the future between a growing group of healthy old people and an also growing group of frail old people. Particularly exposed to un-successful ageing are old women living alone, frail, and with few resources. The cost effectiveness of intervention such as rehabilitation and prevention of disease for old people is demonstrated to be positive. And as is the case with younger citizens, old

people who have a weakened health constitution and well-being must be examined and offered treatment, training and rehabilitation.

Health and Social Policy in Denmark.

Over the last 10-15 years preventive health and health promotion have been given a higher priority in Denmark. Based on an agreement between 11 different Ministries, the Danish Government in 2002 implemented a new and broader public health and prevention of disease programme (Indenrigs- og Sundhedsministeriet 2002). One of the aims of the programme is enhanced quality of life, also for older people and for people with chronic diseases. For the monitoring of the public health and disease prevention programme, a number of indicators have been pointed out. One of them deals with "*Lost number of years with well-being*" measured by a combination of *Health Expectancy* and *Active Life Expectancy.* (Indenrigs- og Sundhedsministeriet 2002). In Denmark, the expected numbers of years with chronic diseases, the "*Health Expectancy"*, has increased for both men and women from 1987-1994, while the number of years with lost well-being termed "*Active Life Expectancy* " has decreased from 1987 - 2000. *Active Life Expectancy* is measured by a) self rated health, b) long lasting periods with disease and c) *ADL:* loss of independence in the activities of daily living. The aim is not

only longer living, but as researchers within Public Health (Avlund et al.1999, p 345) have stressed:

> *" it is important to question if the extra years are active years without considerable diseases and functional limitations, or whether a longer life just implies more years with illness and dependency on help"*

Active and independent living.

Being able to continue usual activities (Legarth 2002) and managing life independent of help are values that are stressed by many older people in the Western world (Keith et al. 1994, Lewinther 1999). It has been shown that old people with physical disabilities often struggle hard to avoid asking for public help (Hansen et al, 2002). Independent living and continuing usual activities are values that are also stressed in the Danish Social Policy (See appendix 1). The aim is to enhance and maintain the users' possibilities of managing on their own and the local authorities are expected to initiate or support general activating or preventive measures (Socialministeriet 2003):

> *"The general objective of Danish ageing policy is to ease the individual's everyday existence and improve his or her quality of life. Danish ageing policy is based on the general principles of:*
> * *Continuity in the individual's life*
> * *Use of personal resources*
> * *Autonomy and influence on own circumstances – including options"*

Recently, Johannesen, Pedersen & Avlund (2004), has confirmed the values of these objectives: For frail 85-years old participants a significant correlation is seen between satisfaction in daily life and staying in usual surroundings, continuing everyday occupations, having close social relations and being independent of homecare services or institutional life.

In a similar study of how very old 'remarkable survivors' manage their lives successfully, Day (1991) has been analysing data from two survey studies (1978 and 1987) of older American women. A strong association is seen between living arrangements and the capacity for independent activity. In particular, the findings show the importance of a combination of contextual factors as to older women's well-being: marital status, living arrangements, home ownership, continuity of residence, and close social relationships. Having social relations, (Waxler-Morrison et al. 1991, Berkman et al. 1992); being able to continue usual activities (Legarth 2002); maintaining a locus of control (Rowe, Kahn 1987); and being able to manage life independent of help, are values stressed by many older people in the western world (Keith et al. 1994, Lewinther 1999). Dr. John W. Rowe, a Professor of Medicine and Dr. Robert L. Kahn a social- and organistaional psychologist are two prominent American scientists involved in multi-disciplinary efforts to examine ageing. (The MacArthur Foundation Research Network on Successful Ageing). According to Rowe & Kahn (1997) a*ctive engagement in life* especially in two forms - interpersonal relations and productive activity – is one out of three elements in successful ageing. The other two are *low probability of* disease and *disease-related disability*, and *high cognitive and physical functional capacity*. Two German psychologists Paul B. Baltes and Margret Baltes were other pioneers in ageing studies. With the purpose of understanding the precursors and conditions of successful ageing they inspired a number of European and American scientists to reanalyse their

longitudinal data sources and they edited their works into a book named "Successful Ageing" (1991).

The concept of successful ageing

According to Baltes (1991) the concept "successful ageing" was introduced as a theme of the 1986 annual meetings of the Gerontological Society of America and has since then been a topic of research and discussion within different scientific strands. Rowe and Kahn (1987) pointed out that the concept of successful ageing forces a distinction on usual ageing and successful ageing and this adds a concentration on heterogeneity rather than on the average. The regard on ageing is renewed and changed by this concept. The ageing process is seen as a challenge and potentials, not limitations, are given priority. Within preventive medicine delay of chronic diseases should be an absolute goal according to Fries (1990), and the most used key marker's of successful ageing are long life without illness and disability. Fisher (1995) found from a psychological standpoint that staying active and involved with others, and having a sense of purpose or generativity were central parameters of ageing successfully. From a sociological perspective Featherman (1990) regards the ageing process as a dynamic of persons interacting with society. Successful ageing is seen as a quality of the transaction between the changing person and a changing society over the entire life span, but especially during a person's later life. Taking a developmental regard on ageing Baltes and Baltes (1990) have created a model of successful individual adaptation to changed

conditions involving three components: Selection - optimisation – compensation (SOC). Successful ageing is seen by Baltes and Baltes as the process by which elders achieve their individual goals in the face of simultaneous losses.

The role of occupation and health

From an occupational therapy perspective it is interesting to notice that many of the findings and discussions within the concept of successful ageing link well-being and engagement in personally meaningful occupations. Leo Kass (1975:28) a research professor of bioethics expressed, that if successful ageing is to be empirically validated, it needs to looked at in terms of objective 'activity':

> *"Health is a natural standard, a norm - not a moral norm, not a 'value' as opposed to a 'fact', not an obligation, but a state of being, that reveals itself in activity (p 28).*

In her work on occupational science, Ann Wilcock (1998) Associate Professor of Occupational Therapy, Universtiy of South Australia, describes the relationship between occupation and health. A particular view of health from the perspective of humans as occupational beings is discussed, focusing on what makes and keeps people well - such as control, engagement, use of resources, meaning and purpose. Occupational imbalance, deprivation, alienation and stress are mentioned as risks for health.

Occupational Science and occupational therapy

According to Wilcock (1991), occupational science is the study of the relationship between occupation, health and humans and the knowledge base for occupational therapists. Wilcock has traced the origin of occupational science to occupational therapy pioneers in the USA in the first decade of this century. In an Education Bulletin, 1910 occupational therapy was mentioned as a '*science of healing by occupation'* but actually more concerned with promoting or maintaining good health for those without access to 'normal' human activity than with being remedial for people with acute illness. Occupational deprivation was seen as causing health problems for institutionalised people.

In their study exploring how activity were regarded by a group of old people Rudman et al. (1997) describe activity as a contributor to well-being and, contrary to the disengagement theory, Rudman. et al. do find no evidence to support that ageing is associated with a declining need for social contact.

The University of Southern California is as well working to establish occupational science as a discipline. In the 'Well Elderly Study' Clark et al (1997) inspired independent-living older adults to reflect on the importance of good health through occupation. Through a process named "lifestyle re-design" the participants selected and performed activities in order to achieve a healthy and satisfying lifestyle. As outcomes of preventive occupational therapy significant benefits were seen in various fields as health, function,

and quality of life domains. Mandel et al. (1999) concluded that occupational therapy improved health and slowed down age-related declines.

Coping with frailty

Over a period of eight years Colleen L. Johnson and Barbara M. Barer (1997:4) have studied "The oldest old" – an age label designed for those of 85 years and more. Case studies illustrate a range of life experiences of the oldest old:

> "It is puzzling, but reassuring to learn from our research that the onset of disability of our respondents does not necessarily lead to demoralisation or despair. In fact, most have retained a sense of well-being and pride in their special status as long-time survivors ".

To gain an understanding of the underlying meaning and processes by which stroke will affect well-being in later life, Philippa Clarke (2003:page?) analysed the situation of a sample of stroke survivors from a national survey of Canadian seniors. Although they all said that their lives had changed, not all survivors demonstrated a decreased sense of well-being:

> *"Some individuals appear to be able to adapt to their residual disabilities and impairments and maintain some sense of satisfaction with their post-stroke lives, while others are devastated by minor sequelae".*

If disabilities prevented persons from especially engaging in activities that constituted an important component of that person's identity, Clarke found that a reduced feeling of well-being occurred.

From observations and semi-structured interviews of eight old people with varying degrees of disabilities who were living successfully in their community, Jackson (1996: 345) finds that

> *"Regardless of their losses these individuals attempted to adapt, calling on theirs resources and redesigning their daily activities to meet their needs."*

All of the eight frail old personse expressed a desire for an engaged life and their complaints about growing old reflected their resentment experiencing restrictions in their activity level. Similar to Philippa Clarke (2003), Hasselkus (2002), and Rudman et al (1997) the study demonstrates that available options for engaging in activities that provide a sense of challenge and are consistent with meaningful themes in one's life are determining factors in constructing meaningful daily experiences.

Old people coping successfully with changes in their daily life

After interviewing a group of very old people expressing high well-being and low well-being, Hillerås (2000) emphasize that very old age takes on a variety of forms and to understand and illustrate the heterogeneity amongst also frail old persons, the voices of 'master survivors' or 'remarkable survivors', i.e. the very old who have experienced a complexity of social, psychological and physical loss, should be heard.

When interviewing a large group of 85 year old people from a Danish population study, it was notable that *everyday occupation* was among the three themes most frequently mentioned when they were asked about

satisfaction in everyday life. The two others were *relations to other people*, and *health*. The number of frail 85-year-old participants may be divided in two equally large groups: Those who experience satisfaction in everyday life and those who do not. The differences seem not to be linked to the degree of disability or gender, but instead by the possibility of continuing the usual lifestyle and having close social relations. Furthermore, the group of satisfied frail 85-year-old people are characterised by staying in their own homes without help (Johannesen, Petersen, Avlund, 2004). No conclusions can be drawn on cause-effect, but since most of the 85-year-old people had an everyday life with fewer activities, it would be valuable to investigate further how the 85-year-old participants actually describe this change in their everyday lives.

Amongst questions that arise are:

- Which activities are given up and why?
- Are some of them linked to satisfaction in everyday life?
- How do they experience the change in their daily lives?
- And what resources and strengths help them handling their everyday life?

At present there is a lack of knowledge concerning the coping abilities of frail old persons experiencing strain such as change in everyday life due to frailty or other social events that are known to include risk for health and well-being.

Aim and objectives

Research focus

Gerontology scientists agree that engagement in personally valued activities contribute to an experience of well-being and satisfaction in the ageing process. Little is known about how the oldest old perceive a change in the ability to maintain such occupations, thus focus of this research is to learn from a group of 85-year-old master survivors, who in spite of decreased daily activities still express satisfaction in their everyday lives. The reflections and explanations of how their everyday life functions and how 85-year-old participants manage changes in activity level – all this represents a rich source of information that we can learn from.

These pages will draw on research made on quantitative data from a population study of 187 frail 85-year-old men and women in Glostrup, Copenhagen "*Study 1"* - See app. 2.

In this present study -"*Study 2-" a* "combined method" approach is used, in order to come closer to explanations and to encircle / or identify abilities or modes of support, that seem to be especially linked to the group of satisfied frail 85-year-old participants . First a quantitative approach will be used, in order to identify the correlates of satisfaction in everyday life for frail 85-year-old participants followed by phenomenological analyses to gain a more

comprehensive understanding and explanation of the underlying meaning and processes following a successful mastery of change.

Study 1 versus Study 2:

In *Study 1* all data were answers to closed questions with a limited number of possible answers, and a quantitative approach was used in the analyses. In this study - *Study 2* - data are comments to open-ended questions, and as well a quantitative as a qualitative approach will be used.

Research questions

How do frail old people describe changes in their daily life and which factors and competencies help them mastering such changes successfully?

Overall aim of this study

Through employing the concepts of successful ageing, the occupational science and with an occupational therapy perspective, the aim of this work is to gain a deeper understanding of factors related to apparently frail old people who nevertheless master changes in their daily life successfully.

Specific objectives for this study

Will it be possible to find patterns in the way by which the frail 85-year-old people experience changes in their daily life?

And which resources and strengths helped them handling changes in their everyday life so well?

Working definitions

"*Old people*" in this study are +85-year-old, born 1914, in 1964 they all lived in the area of Glostrup, Copenhagen

"*Frail*" is defined as people who felt tired or were in need of help within mobility defined by two subscales of the Avlund Scale (Avlund 1993, Avlund 1996).

"*Coping successfully* " is analogue to the "Everyday life-satisfaction", measured by answers to three questions:
Function of everyday life: Good vs. fair, bad, poor;
Satisfaction with social contacts: Very or fairly satisfied vs. neither satisfied or dissatisfied, somewhat or very dissatisfied;
Satisfaction with daily existence: Always or mostly vs. sometimes or almost never.
Those who answered positively to all three questions are defined as experiencing everyday life satisfaction.

"*Changes in daily life*", measured by answers to two questions:

- How do you find everyday life is functioning? If changed, how?

- Are you occupied in daily life as usual?

"Factors and competencies": To define factors and competencies, the Canadian material "*Enabling Occupation - an Occupational Therapy Perspective*" (Townsend et al. 2002:44 ff)) and the *Model of Person-Environment-Occupation* are used as inspiration for the analyses. It is a model developed to give OT's a shared frame of reference, including definitions of concepts within the occupational therapy profession.

"Competencies" are defined as personal performance components.

"Factors" are regarded as external resources placed in the environment.

"*Concept of successful ageing*": Successfully adapting to changes is necessary in the process of ageing, according to Baltes & Baltes (1991). Their model "SOC" and the adaptive competencies of selection, optimisation and compensation are used as a guide for the analyses.

"*Concept of occupational science*" : Within occupational science locus of control, social relations, use of own resources as to occupation are aspects promoting health, whereas experience of failure, occupational deprivation, occupational stress/imbalance, and feeling of boredom relate to risk of health.

Literature review

In this study, the hope is to find and understand the reasons behind the fact that some frail old people manage to keep satisfied with their everyday life despite changes in everyday life in the form of "doing less than usual". As an occupational therapist convinced of the positive relation between occupation, health and wellbeing one would expect that "doing less" would be a dramatic risk factor. The question is whether occupational needs are changed through the ageing process? In the search for evidence, especially research in the field of occupation and satisfaction or well-being in the lives of old people will be explored and critically analysed.

The following chapter will include reviews of selected literature concerning:

- the concept "Successful ageing", including a model of Successful ageing
- occupational science and well-being in ageing
- occupational risk factors
- research concerning "the oldest old people" and everyday occupation
- research concerning "frail old people" and occupation
- work done on the perspective of continuity / or discontinuity of daily life or important activities in old age.

The concept: "Successful Ageing"

Regarding literature there seems to be four sites of knowledge which inform about the concept of successful ageing. They are: *Physical sciences, social sciences, behavioural sciences, and cultural-gerontological sciences*

Physical sciences: health as outcome in successful ageing

One perspective is connected to a vision of life ending with disease and /or disabilities (Fries (1990), Katz (1983), Vaillant (1990)). Consequently, physical health (length of life and biological health) and psychosocial adjustment (mental health, psychosocial efficacy and life satisfaction) are the two outcome measures most often used as dimensions on successful ageing (Vaillant 1990). Within preventive medicine an absolute goal is to prevent or delay chronic illness. Fries (1990:35) added a public health viewpoint with his theories of *compression of morbidity*.

> *"Successful ageing consists of optimising life expectancy while at the same time minimising physical, psychological, and social morbidity, overwhelmingly concentrated in the final years of life*

The strong association between lifestyle and health is increasingly a matter of public knowledge and the measure of *active life expectancy* provides information on health in terms other than death, which is used for planning and policy making. Katz (1983) uses a*ctivities of daily living* to forecast expected remaining years of functional well-being, and among older individuals assessment of *functional ability* has become an essential part of health studies. Avlund et al. (2000) demonstrated that strenuous *physical*

activity at and around the home is seen to be an important predictor of the maintenance of independence in old persons but also of enhancing losses in cognitive function among healthy old people (Rowe & Kahn 1997). An aspect of *physical activity* can be tiredness. Avlund (2001) has in more longitudinal studies found that *tiredness in daily activities* is a strong early warning of disability and mortality: Non-disabled individuals who felt tired in their daily activities had about twice the risk of being hospitalised and of being users of home help 5 years later.

Isolation and *lack of connectedness to others* have been recognised as predictors of morbidity and mortality in more studies. Causality throughout life as to being part of a social network is a significant determinant of longevity, especially for men. Rowe and Kahn (1987) found evidence for the positive influence of *social support* (or connectedness) and *autonomy* (control) on health. Experiments with people showing extreme functional losses have shown that some of the losses are reversed by modest increases in autonomy and the encouragement to use it. The experiments suggest the importance of distinguishing between autonomy-enhancing and autonomy-reducing modes of support. In a Danish longitudinal population study by Avlund (1998) an independent association is found between social relations and mortality for men who did not help others with e.g. repairs and who lived alone. In the same study women with no social support to help with other tasks, had an increased risk of dying during an eleven-year follow-up period.

Social sciences: transaction and adaptation as outcome for successful ageing

The sociological orientation to successful ageing takes its starting point in the collective rather that in the individual. From a sociological perspective ageing is not regarded as processes of the individual but as a dynamic of persons interacting with society. Featherman (1990:50), who is an American social scientist working on life span development and behaviour, views successful ageing as a quality of the transaction between the changing person and changing society over the entire life-span, but especially during a person's later life. Successful ageing is seen as a construct applied to the society itself - the successfully ageing society, and it is discussed how society can improve the quality of life for the oldest population and how the ageing of citizens can lead to the betterment of society. Wisdom is used as an example. Societies utilising the growing wisdom of old people will increase the positive bases for self-esteem and for the social prestige of old people as a collective virtue. Conversely, as argued by Featherman (1990), whenever the group of old citizens is characterised as a burden and the young people as the ones who have to pay, it implies a dialectical opposition. According to Goffmann (1987) an organisational social psychologist, such negative attributes will be incorporated in the self-concepts of stigmatised people, an example could be when frail old people reject having care or treatment arguing that it is of no use, since they are too old for treatment.

Successful ageing may differ across history and societies and Featherman (1990:52) argues that part of successful ageing is an individual's learning to plan

> *"In the transactional view, successful aging is defined at the point of intersection between the developing person and the changing societal context"*

Regarding successful ageing as an adaptive process rather than a state or outcome, measurements must concentrate on both

a) Person's adaptive competencies when being pro-active instead of re-active, when actively seeking stimulation, or creating novel experience

b) The society's adaptive problem-solving competencies, such as securing life-span education, provide available productive roles and other positive attributes and functions of being long-lived.

As critics of the concept two sociologists from Norway and Sweden Daatland (2000), Torres (1999) and a Danish geronto-psychologist Fromholdt (1998) claim that focusing on successful ageing may lead to seeing the course of life as a competition where it is up to yourself to be a success or a failure. Fashionable is much investigation on the power and importance of the adaptive behaviour that old people seem to mobilise to compensate for loss of relatives, abilities, roles etc , whereas less research focuses on the adaptive abilities of the society. It is argued that the concept might be useful, especially for the youngest among the old.

Successful ageing in a cross cultural perspective.

In her critical work on the construct of successful ageing Torres (1999) points out that successful ageing is often equated with delaying the ageing process, remaining active and productive, being future-orientated, and managing on your own. Too often successful ageing is connected to being younger than the biological age. Rather than talking about ageing as a success, cross-cultural gerontologists prefer to name it ageing with dignity or style. Old persons need a feeling of living in a society where the values of past times are still of importance. Otherwise, the group of older people risk being a marginal group in their own society, to be spectators to a society they do not understand any more or cannot identify with. As life expectancy grows and the pulse in society gets faster a larger and larger group of people risk feeling impotent/ powerless strangers.

Culture plays a role. In the studies of successful ageing, researchers must understand what older people believe to be ideal, i.e. the guide that determines what the good life is all about (Fisher 1995; Torres 1999). Some studies have attempted to decipher what successful ageing means in different cultures - and one of the largest cross-cultural collaborations is project AGE conducted by Keith et al. (1994:xi). To determine the meaning of successful ageing and to chart the pathway that different cultures provide to achieve a successful old age, seven anthropologists worked in seven places for more than ten years, collecting data searching for the bottom line question*: "where is it best to grow old?*" The way old people understood successful ageing was

contingent upon their cultural origin. Americans, for example, associated successful ageing primarily with self-sufficiency and the ability to live alone, while those in Hong Kong could not understand why one would want to be self-sufficient in old age. Instead they viewed their families' willingness to meet their needs as a sign of successful ageing.

Behavioural sciences - coping and adaptive strategies successful ageing is seen as a process

The psychological perspectives of successful ageing have a focus on the individual capacity to cope with life, and a recognition that old people are not all alike. Successful ageing is closely linked to the experience of having values to head for, values that are adjusted to the amount of personal power and social circumstances. According to Fisher and Nilsson (1996), who interviewed forty old people about the meanings they attached to successful ageing and life satisfaction, this implies both a minimum of self-esteem, meaning in life, a sense of future and interaction with others. Behavioural scientists as well as the sociological scientists criticise many ageing studies for being more concerned with static results such as health outcomes, statements of well-being or satisfaction, than with the process of ageing. In the study of Fisher and Nilsson (1996) the respondents' understanding of successful ageing involved attitudinal- or coping-orientation twice as often as for life satisfaction.

SOC –Selection, Optimisation and Compensation - a model of the successful individual development

Baltes & Baltes (1990), eminent gerontologists, have created a model of the successful individual development (including ageing) seen as a process involving three components: Selection - optimisation – compensation (SOC). When physical abilities have decreased and old people have to cope with biological, psychological and social challenges of old age, it is important to choose personal goals (selection) and to find other ways of reaching the goals (compensation). How the components of adaptations are realised depends on the specific personal and societal circumstance that individuals face and produce. The SOC-model also sees 'optimisation' of the potential for growth embedded in the process of selection and compensation. This way, successful ageing is seen by Baltes as the process through which old people achieve their individual goals in the face of simultaneous losses.

More studies have searched for the meaning that old people attach to successful ageing such as Hillerås (2000), Day (1991), and Fisher (1995). In summary old people see five features as important:

- *Self-acceptance and perceived well-being*
- *Capacity for self-management / autonomy*
- *Interaction with others / social emotional ties*
- *Sense of purpose / outlook on life*
- *Engagement with the outside world / personal growth*

Occupational science and well-being in old age.

Within occupational science human beings are described as occupational beings. Ann A. Wilcock (1993), one of the founders of 'occupational science' sees occupation as a human need and purposeful activity as a central aspect of the human experience, necessary in the survival of species. Occupational science is the theoretical foundation of two qualitative studies on ageing. Jackson (1996) listened to the stories of members of a group called "Health Care Advocates" and Rudman et al (1996) searched for the characteristics and potential of occupations among healthy old people. Informants in both studies expressed a desire for a committed life and claimed that activity contributes to one's sense of well-being. As an essential and important mediator of the relationship between activity and well-being the *sense of control* is stressed in the study of Jackson (1996). To informants having control over their activities is related to the existence of *choice*. As a major theme informant as well in the study of Rudman et al. (1996) as in the one of Jackson (1996), it is argued that activity can help establishing and maintaining *social connections*. Activities can be used to make connections with new persons and expand one's social network.

Engagement in activities sets beat or rhythm to their lives – and additionally occupations were in both studies seen as providing the overall *structure to their day*. Informants indicated that performing activities promotes the feeling that time is passing quickly; one informant says that during gardening: "*time just flies, and it's gone"*. Others use activities to create a weekly schedule.

Hasselkus (2002) discusses the way everyday occupations demonstrate aspects of one's *identity*. In the ageing process activity may contribute both a sense of continuity of identity and a sense of continued growth. Several informants in the research of Rudman (1996:644) stressed that they did not feel old and differentiated themselves from the negative stereotypical images of "old people". An example:

> "*I've got so many interests, probably more that most people my age" and another informant said: "there are not many people at this age that are active*"

Although informants suggested that they basically remained the same persons over time, they also indicated that they continue to develop. Rudman (1996) points out that activity, especially if it involves developing and improving skills or learning, may foster a sense of continued growth by promoting the development of personal characteristics and the discovery of new aspects of oneself. These findings lie close to the statement Wilcock gave in a key-note speak(1998b) on the relationship between *doing, being and becoming*.

As a conclusion of many years of research, Csikszenthmihaly (1993:39) states that the best periods that people remember are generally not the relaxing moments of leisure and entertainment, but times when they were actively involved in a difficult enterprise, an activity that stretched their physical or mental abilities. Csikszenthmihaly describes how persons can experience "flow":

> *"when challenges are high and personal skills are used to the utmost, we experience a rare state of consciousness. Then "we feel involved, concentrated, absorbed" and "the awareness of time disappears, and hours seems to pass by without noticing"*

Studying "flow" Csikszenthmihaly has used the Experience Sampling Method, or “ESM”. The method consists in giving subjects an electronic pager and a block of response sheets. About ten times a day a radio signal activates the pager and the subjects write down where they are, what they are doing and how they feel. In a week the average subject will complete about 40-50 pages, providing a series of snapshots of their activities and experience. Csikszenthmihaly (1993:40) found that in a representative sample of urban workers flow was experienced in 54% of the time when actually working, versus only 17% of the time in leisure, and he comments:

> *"paradoxically in our culture the aversion to work is so imagined that even though it provides the bulk of the most enjoyable experiences, people still prefer having more free time, even though a great deal of free time is relatively boring and depressing"*.

Some of the highest levels of flow are the rare occasions when people are involved in active leisure, but such activities occur so rarely in the life of the average person that it hardly leaves a trace. Csikszenthmihaly states that we are living in a period which prefers thought to action, and when having nothing specific to do and being deprived of ordered stimulation, such as a book, a conversations, a TV- programme, this will often bring up depressive thoughts. A way to improve the quality of life is not primarily through thinking but through doing.

Occupational risk factors.

When activity at the most fundamental level is seen as an essential need, a decline in activity would lead to a decline in well-being. In her book Wilcock(1998a) describes how o*ccupational stress, injustice, alienation, deprivation* and *imbalance* will result in risks to health.

In the study of Rudman et al. (1996:643) one female informant discussed the effects of not engaging in physical activities:

> "*If I don't (do physical activity) and just sit around, I don't feel as good. I feel better if I get out and do something, like even if I walk to the store, I don't feel as alive as if I do some physical activity"*.

Through various experiments, scientists have proved that human organs need to be used. As an example, a famous experiment (Dietrich et al.1948) showed how healthy young students became debilitated by immobilisation. They started suffering from metabolic disorders and became so weakened that after the experiment, they needed recovery for 3-4 weeks. Experimental sensory deprivation might cause psychotic hallucinations and confusion to young students after only a few hours without sensory stimulation. According to this experiment, Vagn Aage Porsman (1987) points out that when inactivity has such a harmful effect on healthy young people, there is a big probability that inactivity is the cause of many diseases, specially among frail senior citizens. Deprivation of occupation is not only physiologically a health risk, but also socially and mentally. Referring to research among senior citizens done by Kay et al. (1964) and by Erdner & Gillberg (1978), a Danish geronto-psychiatrist Gudmund Magnussen (1987: 219) points out that symptoms

similar to dementia might occur if inactivity is combined with somatic disease, isolation and consequently deprivation from interacting with others. In an experiment with flow-deprivation, Csikszenthmihaly (1975) concluded that flow-deprivation makes people feel tired and sleepy, less healthy and less relaxed. Reports from the experiment in general were overwhelmingly negative. The participants in the experiment reported more headaches, judged themselves in more negative terms, and felt less creative and reasonable.

Remarkable reactions in the experiment were the age and sex differences: Old people were more affected than young ones by deprivation of flow. And as to differences in sex, females were more affected physically and cognitively than males.

Occupational deprivation and lack of control

The research of Csikszenthmihaly,M. (1975) indicates the importance of monitoring effects. People seem to need to be able to decide themselves what they want to do – having choice and control.

Informants in the study of Rudman et al. (1996:643/646) indicated that a decline in activity would lead to a decline in well-being:

> "*you'd only be a vegetable if you didn't (do activities). You certainly wouldn't be alive or whatever"*

Informants talked about the negative effects of not feeling in control of their activities. One female informant suggested that the two things that make up a bad day are

"not feeling well and if you can't do the things that you wanted to do".

When a male informant was asked whether he thought it was important for his well-being to be able to do what he wanted, he stated:

"*I think that if you're doing things that you don't want to do, I can't think of anything more devastating than that"*

Similarly, when studying usual and successful human ageing, Rowe and Kahn (1987) found evidence that residents in retirement settings scored higher in life satisfaction and adjustment if they were more in control of their own activities. And a study of Schultz (1976) demonstrated that frail old people became more active, alert and had a lower mortality if they were given more control.

In their study of the oldest among the old, *remarkable survivors,* Johnsen and Barer (1997) also found that a personal sense of control is an important aspect of daily lives. The sense of control and the possibility to decide is shown to have importance for the well-being, even if one stays in a nursing home or is dependent on home care services. As a continuation of their study, an interdisciplinary team of gerontologists (Wilken et al. 2002:82) carried out a qualitative study of factors related to late life independence. A random sample of 142 old American people from 86 –100 years of age mentioned *"a myriad of factors that they believed contributed to their late life independence".* The concept of locus of control - both internal and external locus of control - proved to be a useful way to organise these factors. Future studies are asked for to understand the processes by which individuals access,

integrate and change styles of locus of control and specify what the styles of locus of control mean to the oldest old.

The oldest old people and everyday occupation

As part of the 1989 study of 75-year-old people in Glostrup, Denmark, who were born 1914, a total of 748 persons were interviewed in their homes by two occupational therapists. The presence of a personally important activity was significantly related to life-satisfaction and self-rated health as well for women as for men (Legarth and Avlund 1993). Gender differences were related to the importance of the activity: Significantly more men than women indicated their occupation with challenge and new experiences, and more women than men indicated that they preferred activities with a useful purpose. Interviewed again at 80, more participants had given up their most important activity. Legarth (2001) found a significant correlation between those who had ceased with their most important activity from age 75 to 80 and needing help in PADL-activities, feeling tired in mobility activities (among men), and having lesser life-satisfaction at age 80 (among women).

In a study of how very old 'remarkable survivors' manage their lives successfully, Day (1991) analysed data from two survey studies of old American women conducted in 1978 and 1987. A sample of 1.049 women 66-77 years of age "the 1978 Survey" and 589 women (83% of the known survivors) 77-87 years of age, traced and re-interviewed ten years later. In

1988, 20 women from "the 1987 survey" were interviewed in their homes. Locating women along a continuum of successful ageing and utilising a longitudinal design, Day (1991:297) tries to identify life events that may be potential trouble spots. The women's experiences suggest that ageing is an ongoing process over the entire life-course, affected as much by internal forces such as spirit, will-power and personal resourcefulness as by arbitrary outside happenings. A strong correlation is found between capacity to manage and living arrangements, which highlights the preferences of participants to maintain separate households. The women had their pride. Many say that they are reluctant to ask even their children for help. Among women in this study the capacity to enjoy life is a prime component of successful ageing. The stories demonstrate

> "*that successful ageing is the outcome of a nexus between personal propensities and the characteristics of the environment".*

Day (1991:286ff) suggests that for the provision of public services it is necessary to supply objective assessments with information about the interests and goal of the old women themselves. For example, the local community can support these interests by strengthening the capacity for self-management. For professionals with a medical orientation, health (morbidity, longevity) is the usual focus and what they use as ultimate goal to distinguish successful ageing from ageing poorly. For the women in the study of Day, the central focus of their concern, the goal to which they give priority, is the capacity to do things for themselves. Cataracts, for instance, are feared

because they prevent reading or driving on your own to go shopping or pursuing particular hobbies or interests.

Hillerås et al (2000) studied the '*subjective experiences'* of how the very old people experience their total life situation. From the Swedish Kungsholmen population study a sample of 12 persons at the age of 90 were selected for an interview (6 expressing high well-being and 6 low well-being). The reflections of the old people pointed to personality and self- perception as much as to the actual circumstances of the individual. Most people in the high well-being group stress *satisfactory relationship with family and friends* and they tend to focus on *what they were capable of* rather than on their limitations. Persons with a more positive outlook on life had *adapted more successfully* to their changing world and had *continued to make plans for the future* and they were generally not disappointed with their old age. The findings from this study do not claim to represent the experiences of all people over 90 years of age, but it is concluded that *very old age takes on a variety of forms.*

Research concerning frail old people

Old people with physical disabilities often struggle hard to continue their usual lifestyle in their own homes and try to avoid asking for public help (Hansen et al, 2002). Objective measurements of dependency such as living in service houses and use of home care showed in the study of Hillerås et al

(2000) a correlation between low well-being and high dependency. Recently Johannesen, Petersen and Avlund (2004) confirmed these findings in a Danish population study: Significantly less frequently frail 85-year-old persons express satisfaction with their daily life when they are dependent on home care services or are living in an institution.

To gain an understanding of the underlying meaning and processes by which a stroke affects well-being in later life, Clarke (2003) analysed the situation of 282 stroke survivors from a national survey of Canadian seniors. In addition Clarke conducted qualitative in-depth interviews with 8 community dwelling stroke survivors, who were at least 60 years of age and had a varying degree of physical disabilities.In the quantitative analysis a significant relationship between physical and cognitive disability and a limitation of the well-being of stroke survivors was seen. However, in the interviews it seemed that although all the old people interviewed recounted that their lives had changed, not all survivors demonstrated a decreased feeling of well-being. However, if the residual disabilities prevented a person from engaging in activities that constituted an important component of that person's identity, the well-being of the survivors was considerably reduced. Having more years of education seemed associated to a higher sense of personal growth, purpose in life and environmental mastery in the situation. Survivors who expressed satisfaction with their social support reported higher well-being and self-acceptance, and all survivors identified the help they received from rehabilitation programmes as extremely important for their

ability to successfully engage in adaptations and report a positive sense of well-being.

Continuity / or discontinuity in old age

Continuity is a key-principle when planning treatment and intervention for frail old citizens. More scientists (Hasselkus 1978, Grimby, Wiklund 1994) have stressed that physical and psychological problems increase when old persons are exposed to changes, such as relocation from one house or ward to another, becoming a widow and being institutionalised. For frail old persons, the study by Penninx (1998) confirmed that an experience of more than one negative life event remarkably reduced the probability of being able to keep emotional power and independency for the participating women. All in all, many studies point to the importance of continuing everyday life activities, social roles and environmental setting seen from a preventive point of view. However, to our knowledge, no studies focus on the relationship between life-satisfaction and changes in daily life for frail old persons, men as well as women. This is of outstanding importance since they are a group of old citizens that, due to their state of frailty are at an especially high risk of many changes such as relocation and of losing everyday activities, social roles and self-esteem.

Final remarks:

From several theoretical and research perspectives, ageing is regarded as a situation implying many biological, social, and psychological risks and crises, and ageing successfully as the ability to maintain or restore psychological well-being. However, in none of the different studies on *successful ageing* attention has been drawn to the question if humans change their need for occupation and activity in the process of ageing.

The model of successful ageing proposed by Baltes and Baltes (1991) includes individual abilities to adapt and cope with changed conditions and to this Featherman (1990) Daatland (2000) and Torres (1999) add the need of flexibility in the society to meet the needs of its old citizens.

Studies in *occupational science* emphasise on the one hand that engagement in personal meaningful and challenging occupations has a positive impact on the well-being of human beings and on the other hand, that imbalanced or stressful occupational demands or occupational deprivation may cause risks for health. Only the study of Jackson (1996) focuses on the occupations in the lives of frail old people, but the informants all seem to be resourceful and active persons, giving advice to others. A gap of knowledge exists concerning the experiences of a broader group of frail old people who have reduced activities in their everyday lives.

Consensus drawn from the studies concerns the heterogeneity of old people and the importance of staying active, involved with others, independent, and having a sense of purpose or generative ability. Legarth (2001) regards

changes in having a '*most important activity'* as being a risk factor for the old and recommends further research. The work of Johnson and Barer (1997) discusses differences in the everyday situations in the group of 'younger old' and the 'oldest old' people. To my knowledge, Johnson and Barer are the only ones to question if the need for an active, social life and independence also covers the group of the oldest old people.

Methods

Background of the present study

Since 1964 the Research Centre for Prevention and Health (RCPH), Copenhagen County, Denmark, has examined different birth cohorts to gain descriptive and predictive surveys about health and well-being during a life span for different population groups. More than 20,000 persons, randomly selected from the background population of 300,000 inhabitants (Copenhagen County) were invited to participate. The studies in Glostrup comprise descriptive and analytical, clinical epidemiological studies. With a multidisciplinary approach, self-reported answers were given to validate measures concerning functional ability, satisfaction in everyday life, social relations, activity-based life-style, mood, use of health services and other social circumstances.

This study was part of the longitudinal study of a population, defined and named the *'1914-population cohort in Glostrup'*. In 1964 the investigation started and since then the cohort has undergone examinations seven times. The latest investigation was in 2000. Since the population cohort was 70 years of age the investigations were supplemented by home-visits with interviews performed by occupational therapists (see appendix 3).

In the beginning of the study, the 1914 population cohort represented statistically all Danish citizens born 1914, with the exception of fishermen.

At present the sample represents a selected group of survivors and is no longer representative in this respect.

The primary methodology of the survey is associated with positivism - linking objectivity to the research process, independent of the setting of the research. Questions were mainly factual with an approach following methods of standardisation, such as fixed categories and a well structured interview situation in order to produce findings that were replicable (May 2001:92) The data from all the investigations are stored in computer readable form (SPSS statistical programme). Statistical analyses of the findings are currently undertaken and published by the research team and other researchers.

Research design

In this study a mixed methodology was chosen, using quantitative and qualitative strategies in analysing data. Combined method studies are becoming more common but some epistemological tension continues to exist, as the methods belong to divergent paradigms. Quantitative research is regarded as falling within a positivist paradigm that assumes the world to be measurable, stable, and predictable; whereas qualitative research is regarded as falling within the interpretive paradigm assuming that the world and subjects represent heterogeneity in an ongoing, dynamic interaction. According to Silvermann (1991) philosophers actually question whether the bond between epistemology and method is exaggerated, and an increasing interest in finding ways of integrating qualitative and quantitative methodological strategies is apparent. Bryman (1988:126) concludes:

> *"when quantitative and qualitative research are jointly pursued, much more complete accounts of social reality can ensue*"

From an ontological and epistemological perspective, this study considers that daily life is something that can be measured and generalised, but is also something that is unique to each individual. Due to this perspective, the approach in the study of 85-year-old people is both positivistic and phenomenological. The methodology alternates between a factorial and attitudinal survey (Silverman 2001). Data was collected face to face in the homes of the interviewees, using a structured interview form with a mixture of close- and open-ended questions, both asking about factual events and listening to the attitudes and perceptions of the interviewees. The interaction between the interviewer and the interviewee was respected as part of the process of generating deeper insights into peoples' experiences. As such, the methodology moved towards subjectivity and the data was analysed by the use of qualitative methods linked to phenomenology. The analyses do not look for straight-forward cause-effect relationships between two variables, but instead for regular patterns of relationships (May 200:116).

Data collection and measures

The Ethical Committee of Science in the county of Copenhagen approved the protocols. (for details see Appendix 4). When invited, participants had to agree actively by their signature, stating that they were willing to participate (a written, informed consent). Participants who did not answer were only re-invited once by mail.

All interviews were performed face to face by the same occupational therapist (AJ), who filled out a questionnaire. This was designed with open-ended questions woven between closed questions. The open-ended questions used for this study concerned everyday life and management of changes, designed to ask firstly for specific "objective" situations followed by subjective expressed feelings or reflections. This gave the opportunity to analyse processes between the situation and feelings. Silverman (2001:99) refers to these in-depth, open-ended questions as" why and how" questions. In all home visits questions were asked following the same order. The open-ended questions of this present study were all placed in the opening part of the interview. Question 1 (p.3/21) was placed as the end of a section concerning living conditions and self-evaluation of health. Question 2 (p 9/21) was placed at the start of a section concerning leisure activities and question 3 (p7/21) placed at the end of a section with questions concerning social contact to family and friend.

Study population

All data was collected in 2000 when 404 85-year-old people were invited., all born in 1914 and participants in earlier investigations, Altogether 243 persons accepted to participate (participation rate 61%). Comparisons of participants and surviving non-participants in the 85-year-old survey did not show significant differences between participants and non-participants in relation to education, income, functional ability, self-rated health, and satisfaction with everyday life at ages 75 and 80. Use of hospital services in a

five-year period before the investigation did not differ between participants and non-participants.

Sampling

This study population was restricted to 187 frail 85-year-old persons, defined as those who felt tired or were in need of help in one of the following activities: transferring, walking indoors, getting outdoors, walking outdoors in nice weather, walking outdoors in poor weather or walking up the stairs. This was defined by two subscales of the Avlund Scale – the Mob-T scale on tiredness in relation to mobility and the Mob-H scale about need of help in relation to mobility. (Avlund 1993), (Avlund 1996).

A database (created by this author) was used for combined quantitative and qualitative analyses of answers from this restricted group of 187 frail old persons.

Variables included for analyses

Quantitative analysis: Descriptive cross sectional analysis and analysis on frequencies were performed in *Study 1*. For further descriptions on procedures see Appendix 4.

Qualitative analysis:

The qualitative component of the study especially analyses data on occupation in everyday life and management of changes. Answers to three questions will be analysed:

> *Question 1: How do you find your daily life is functioning? (Good, vs. fair, vs. poor)*

If changed, how?

Question 2: Are you as occupied in your daily life as usual?
(Doing more, vs. doing the same, vs. doing less)
If not, what has changed?

Question 3: How do you feel you handle your present situation?
(Good vs. fair, vs. poor)
Could you develop that further, please?

Procedure

The 1914 population cohort consisted of a selected group of Danish people invited repeatedly to these examinations, and many participants stated that they considered this as a responsibility to science and to society to co-operate. The participants gave their informed consent, by reading information sheet about the study and signing it. Furthermore, verbal information was given, when the first interviewer arrived in their home, and thus opportunity to ask for more information. In the interview situation, the comments were expressed by the participant and afterwards referred to in a short sentence by the interviewer (AJ). Before registering an answer, the sentence was first accepted by the participant.

Performing the interviews in the homes of participants helped create a calm and confident atmosphere, and participants were all open and willing to co-operate. As described in Silvermann (1991:90-91):

> *"Emotionalist interviewers want to access the subject given the role of interview respondent. The particular concern is with lived experience. Emotions are treated as central to such experience"*

Data from participants was divided into two groups (See app. 2):

A) Those who expressed satisfaction in everyday life and

B) Those who did not express satisfaction in everyday life

It had been tested if the two groups of participants represented major differences, of gender or physical disability, and no such significant differences were found

In line with the positivist approach, content analyses of comments start by coding respondents' answers into different sets of categories and then by counting the numbers that fall into each category. The concepts of successful ageing and occupational science are used as theoretical guidelines/ hypotheses for creating the codes. Comments from the group of satisfied 85-year-old participants are compared with the not-satisfied participants, in some cases by the use of statistical correlation.

The comments are also analysed by using a phenomenological approach. The narratives through which people describe their worlds (Silvermann 200:136), are accessed by finding themes and patterns of the ways 85-year-old people perceive and manage changes. A model called Giorgis' phenomenological analysing process (Malterud 1999) has been used to structure the analyses. The method has been developed where knowledge should be generated from the perspective of respondents' experiences and lives. The analysing process consists of four phases:

General impression: from wilderness to themes

Units of text carrying meaning: from themes to codes

Condensing: from codes to analytical categories

Summarising: from condensing to descriptions and concepts

(Further descriptions see Appendix 5).

Validity and reliability of the study

This study aims at illuminating aspects of the ageing experience that remained unexplained by the quantitative analyses. Through the available data, the hope is to test hypotheses by examining data statistically and also to demonstrate some uniqueness / or heterogeneity among the 85-year-old individuals. One of the most common purposes in mixed methodology studies is triangulation. By using a combination of quantitative and qualitative methodological strategies and by including a focus on the group phenomena rather than on the individual, the findings are believed to be valid. Every effort has been made to ensure validity of findings.

The obvious qualities of the study are the large number of surviving 85-year-old participants originally selected by sampling, and the interview setting with 'face to face' interviews in the homes of participants.

Judged from a positivistic frame of reference, the particular findings are credible and replicable due to the structured and standardised way of collecting, handling and storing data.

The sample is not representative for all 85-year-old Danish people, but the survey measures characteristics and opinions from a large group of the oldest of old people.

The validity of data from the open-ended questions is secured by checking if participants recognize their own phrasing in the comments registered.

Strengths are that the same interviewer conducted all the interviews, but a bias is the prejudgements of interviewer when selecting pieces of texts for conclusions. A more correct method had been to tape record and transcribe all the answers to the open ended questions. Strengths for the reliability are that all procedures used and all data are open to further inspection.

When analysing the comments, they were coded twice to ensure the optimal validity of the analysing process. The second codes were compared with the first codes. In case of differences the comments and codes were evaluated again and the best one chosen. In the appendices the codes and differences can be seen.

From a phenomenological angle the collection of data should have been more open and flexible to meet criteria of validity for in depth interviewing. When interpreting the data the researcher was able to take into account the social and institutional context that influenced the informants as a group, but only to some extent the context for each individual. The analysing processes will both include test of theories or hypothesis and the creation of themes emerging form the comments. Due to the large number of participants, it is believed possible to see a broad variety of patterns in handling changes. Through the analyses it may be possible to generate new theories for further exploration.

As Silverman states (2000:185) *"asking and answering questions can never be separated from mutual interpretations"* and for the reliability of methods used in this study the values and beliefs of the interviewer will be integrated in the qualitative interpretations of the answers. Actually such influence was demonstrated on two occasions when other therapeutic personnel, as an exercise, had been asked to reveal their main impressions by reading some of the comments. A group of physiotherapy-students noticed that many comments where concerned on the lost ability of going out and moving around whereas occupational therapy students found that many comments were concerned on structure of day and daily activities. And a psychologist found it striking that the old people did not differ from young ones when wishing to keep control.

In the quantitative "*Content-analysis*" as Silverman calls it (2000:128), where the comments are coded and numbers of instances that fall into each category counted, the same observer did code the comments twice on different occasions and with the first codes blinded to ensure reliability. A better reliability would have been present if there had been opportunity to check "*inter-coder-agreement*". It means to test if the categories are sufficiently precise to enable different coders to arrive at the same findings with the same body of material.

Ethics

Findings derive from a study conducted by an occupational therapist and as such had a special occupational angle

As stressed by Silverman (2001:270) (with reference to the German sociologist Max Weber), all research and the conclusions and implications to be drawn from a study were largely grounded on the values of the researcher. The empirical data of this study was collected by an occupational therapist that saw occupational needs as one of the basic human needs. As such - when listening to the comments of participants - the answers concerning activity and occupations may have been especially selected. This relation should be emphasised when using the results of this study, e.g. when debating social policy for the oldest of old people.

The results might not speak of the situation of old people in general

The participants of this study are a group of old people who feel "chosen" and this fact may, of course, have influenced the representative aspect itself. These people have been followed by scientists for 35 years, and an enormous amount of intimate and detailed data has been collected. In the beginning of these studies, the 1914-cohort was highly representative, and the participants knew that their answers were used as the speaking voices of old people at their age in general. Maybe, because of all this interest paid to them through the years, this group of old people have become more aware of factors such as their lifestyle, mood, self-related health and physical activity than old

people at their age in general. It was actually demonstrated that the mortality of this group was statistically lower than for other old people in Denmark, born 1914 (Larsen, 2003).

The social context of the participants is not included in the analyses.

The personal comments were given in an interview where a contact was built up between the interviewer and interviewee. However, analyses of these personal comments were not related to the particular context of the respondents. As a consequence, the diversity of comments must only be used to demonstrate different life situations and experiences - and not to generalise and demonstrate cause -effect results.

The value of informed consent

Participants gave written consent to the Research Centre for Prevention and Health (RCPH), Copenhagen County in Denmark, to store all data in a databank for scientific purposes. All data was collected following a straight plan and the information given, but participants had no opportunity to know what sorts of hypotheses would be set up when their data were analysed by different scientists. Many students and scientists within a multidisciplinary field are using the data, and it is not possible to check the different findings with the participants.

The obligation to communicate the voices of a group of remarkable old Danish people.

Since so many 85-year-old people accepted to participate and invited us to their houses where they spent hours and hours answering all our questions - one feels obliged to utilise the data and to pay proper respect to all the mentioned reservations.

Values / beliefs behind analysing data / preconceptions of the author

It is rare to visit 243 85-year-old citizens who are willing to tell their stories and reflection about ageing and their everyday lives. The participants are regarded as "survivors" and from them we may learn ways to manage the challenges of the ageing process.

Among occupational therapists there is an agreement that occupation is a general human need (Wilcock 1991, Hasselkus 2002), and that involvement in activities gives structure and rhythm to the day, meaning in life, and increased self-confidence (Jackson 1996, Rudman 1997), and that participation in society has a positive influence on health and well-being (Law 2002).

Another agreement emerging is that of regarding successful ageing as a continuous process of development and adaptation (Baltes 1991) and that statements of life-satisfaction or well-being can be seen as confounders of successful ageing (Fries 1991).

The older you get, the more evident becomes the tendency to give up social activities and participation in society (Legarth 1995). Possible explanations may be difficulties due to functional disabilities, lack of company or a desire of more introvert occupations (Johnson and Barer 1996). Being an occupational therapist it is of particular interest to the author to find out if the group of 85-year-old people perceive this decrease in activities as a threat to health and well-being or as a consequence of ageing that is acceptable and without problems.

All in all - strengths and limitations

Due to the use of a mixed methodology, strengths and limitations are mixed as well. The collection of data and the statistical analyses valid seen from a positivistic perspective, but not meeting criteria of validity for in depth interviewing seen from a phenomenological angle. The large number of surviving 85-year- old participants originally selected by sampling, and the interview setting with 'face to face' interviews is strength. The sample is not representative since the group of participants belong to a selected group, but they represent a large number of different meanings from which a variety of patterns can be seen. When interpreting data, the researcher was able to take into account the social and institutional context that influenced the informants as a group, but in the analyses the context for each individual disappears. No cause -effect conclusions can be drawn, but appearance of

patterns of mastering changes will hopefully inspire to development of practice and further investigations.

Results

Findings and analyses from three questions are presented:

Question 1: How do you find your everyday life is functioning?
If changed, how?

Question 2: Are you occupied in your daily life as usual?
If not, what has changed?

Question 3: How do you feel you handle your present situation?
Could you develop that further, please.

The analysis concentrates on the comments from these three questions. In question 1 and 2 the comments from two groups of frail 85-year-old participants are compared: those who express everyday life satisfaction (n= 91 / 49%) and those who do not (n=96 / 51%). In question 3, only the comments from the group of participants who are satisfied with everyday life are investigated.

Question 1: How do you find your everyday life is functioning? If changed, how?

Question1: How do you find your everyday life is functioning? If it has changed, how?	85-year-old satisfied participants (N= 91)	85-year-old not satisfied participants (N=96)
Distribution of answers: *Everyday life is functioning well* *fair* *poor*	 91 0 0	 17 68 11
Number of comments	74	90

Number of coded comments	65	85

Table 1. Number and types of comments to question 1.

Results of analysing comments to question 1(See appendix 6 and 7):

The general impression is that the vast majority of participants are doing less activities compared to earlier in life. Many need more time for occupations and a considerable number feel tired or have limited strength.

Perusing the comments repeatedly, four themes appeared. (see Table 2 and App. 7).

Themes	***Subgroups***
Structure of the day	Time Space
Everyday occupations	Amount of activities Managing with or without help
Health	The ageing process Health and occupations
Relation to others.	Life with or without a spouse Contacts in local area

Table 2. Themes emerging from comments to question 1.

Structure of the day in time and space

Occupations fill out the time and give rhythm to the days'. The relationship between time and occupations illustrate the quality of daily life as *good* or *bad.*

> *I have a lot to do and time always passes nice and quickly*
> *I have given up many things; but I never feel time is passing too slowly*
> *Now and then my everyday life is boring – I mean, doing the same everyday*
> *One feels so stressed, time is too short; I am very slowat doing everything*

Satisfaction in everyday life is not just a question of number of activities, but also how they fit into the need for variation, challenge and strengths.

More of the daily occupations also deal with space and place, and here the quality of *going out* is emphasised:

> *I am pleased I can go and sit in my garden.*
> *I miss going outdoors – just a trip in the street.*
> *I only walk* from kitchen to dining-room and to my bed

Everyday occupations

Some are able to accept and cope with a decrease in activity level

> *I cannot do much anymore. But I take it as it comes*
> *I only do what I want to, my life has become quieter.*

While others experience it as a loss and a feeling of failure

> *I used to be terribly proud of my house - now I must accept the dust*
> *I walk around all day long in my dressing gown now – earlier I used to be so busy*

If a decrease in activity level is experienced as deprivation it seem to influence well-being negatively:

> *Earlier I was able to work really a lot. Now my husband is doing it. I feel superfluous when I cannot do things*
> *The last two years I have become frail, I had an accident of falling. I am tired and sleeping a lot*

Many set a pride to independency. Even though it involves great and increasing difficulties, participants are striving to manage life without help:

> *Everything takes so long time to do for me. But I still have the will and wish to manage on my own (be independent)*
> *I can still drive my car and manage to go shopping. But it becomes more and more difficult to see and to move around on my own.*

Health

Problems with health such as poor legs, poor sight, accidents of falling, remembering bad events, and having pain are mentioned by many as being reasons for changes in everyday life. Some just mention being more tired or slow and seem to accept so.

I have to rest (take a nap) during the day, I feel tired more quickly

while others perceive it as a stressful experience:

One feels so stressed, time is too short; I am very slow at doing everything

The relationship between health, occupations and well-being is stressed:

Since I cannot read any more, I feel a little lonely. Earlier I had no problems, time passed so easily
I cannot participate as much as usual and I feel kind of depressed / in poor mood

Relation to others

Among arguments concerning why the everyday life has changed a major part of comments relate to everyday life with or without a spouse. More seldom children and grandchildren are mentioned. The loss of a spouse most often influences the quality of life negatively. Participants talk about loneliness and missing someone to communicate with and to go out with

Since my female friend died, time passes too slowly.
I am alone and now I must manage everything by myself.
I cannot feel happy / glad. I am not able to participate in anything

More respondents emphasise the stress of having to take care of a sick spouse:

I am more tired now, and have a lot to do because my spouse is sick. My life has become very stressful.
Because of my friend's disease we do not take part in many activities anymore

While others have been able to cope positively as to having lost a spouse:

At present I can do what ever I want - I have no husband and no children to look after anymore
I enjoy being alone; I have become used to it

A good social network is pointed out to be helpful in the present situation

Here (in the Elderly Centre) I can have company if I wish to
My neighbours are visiting me a lot

However, not all who moved into a centre are satisfied. Some are disappointed and miss having the opportunity of meeting with others:

I have become too lonely, even though I am living here (in a Centre)
Here is not as much social life as we (my children) had hoped

Occupational life and well-being

Many of the comments included positively and negatively loaded words such as sense of control, choice, stress, boredom, sense of failure; terms that could be recognized from the theories of occupational science by Wilcock (1991). In order to investigate if a connection could be found between occupational life and well-being a list of codes were created, and the comments were coded and re-coded by interpretation (see appendix 6).

Codes
Sense of control and choice = C Social support = Soc. Using own resources = U Stress / imbalance = Str. Deprivation = Dep.

Boredom = B. Sense of failure = F Message is unclear and not possible to code = -

Table 3. Abbreviations of the codes used in question 1.

Organising the comments by coding shows a significant /correlation between being satisfied with everyday life and having a sense of control, having social support and using own resources. Also, a very strong /significant correlation between lack of satisfaction in everyday life and expressing stress/imbalance, deprivation of occupation or social contact, experience of failure, and being bored. (Illustrated in pie-charts on next page)

Question 2: Are you occupied in daily life as usual? - If not what has been changed?

Out of a total of 187 85-year-old participants, 133 gave comments to a change in daily occupations:

Question 2: Are you occupied in daily life as usual? - If not what has been changed?	85-year-old satisfied participants (n= 91)	85-year-old not satisfied participants (n=96)
Distribution of answers: *Occupied in daily life as usual?* *Doing more* *Doing the same* *Doing less* answers missing	 4 44 42 1	 4 21 70 1
Number of comments	55	78

Table 4. Number and types of comments to question 2.

Results of analysing comments to question 2 (See appendix 8):

Analysis of the comments are divided into two:

The explanations of *what has been changed* and of *handling the changes.*

What has been changed?

Many comments concern having given up hobby-activities such as crafts and creative activities. As next decrease in activities, the group of 'satisfied'

participants mention activities in and around the house and garden whereas the group of 'not satisfied' mention going out and gardening.

Comments to changed activities	*85-year-old satisfied participants*	*85-year-old not satisfied participants*
Hobbies, crafts and creative activities	29%	29%
Sports and physical activity	12%	7%
Housework and cooking	17%	11%
Going out	7%	27%
Gardening	15%	13%
Social activities	7%	5%
Reading, card-playing, crossword puzzle	12%	7%

Table 5. Distribution of changed activities mentioned in comments to question 2.

Handling the change

Reading the comments repeatedly a difference between the two groups of participants appears in the handling of the situation. Inspired by the model of Baltes & Baltes (1991), named "SOC" (Selection, Optimisation, and Compensation), sentences were given codes if they demonstrated adaptive competencies such as *selection*, *optimisation* and *compensation*.

Examples of ability to adapt in the process of ageing:

> *Earlier I enjoyed knitting, now I listen to music more and more (selection)*
> *I like to sit down when working now (optimisation)*
> *I am hampered by poor eye- sight, but then I use a special reading - screen (compensation)*

Participants who do not express everyday life satisfaction seem more often overwhelmed in the process of losing physical strength. Examples:

I do as little as possible now, would like to do something
I enjoyed the days when I could go shopping
I cannot handle housekeeping, I cannot do cooking, or baking cakes

Analysing for the prevalence of adaptive strategies only a minority demonstrate this in the comments. A strong correlation is found though between satisfaction in everyday life and adaptive competencies. In the group of satisfied participants 18 comments out of 55 (32%) were found to include adaptive strategies whereas only 6 out of 78 (0,8%) in the group of participants who lack everyday life satisfaction answers did so.

Question 3: How do you feel you handle your present situation?

In depth comments, please.

Results of analysing comments to question 3 (See appendix 9):

Question 3: How do you feel you handle your present situation? In depth comments, please.	85-year-old satisfied participants (N= 91)	85-year-old not satisfied participants (N=96)
Distribution of answers: *I feel I handle the situation* *well* *fair* *poor* *Data missing*	 78 12 1	 36 49 4 7
Number of comments	85	87

Table 6. Number and types of comments to question 3.

Due to the aim of this study, the analysis of answers to this question is concentrated on the experiences of 'master survivors' - i.e. the group of satisfied frail 85-year-old participants. More of the participants point to capacities and circumstances that helped them manage their situation.

Themes and subgroups emerging from analysis , see table 6:

Themes	***Subgroups***
Adaptation	Learning how to cope with diseases Adaptive strategies such as SOC: selection, optimisation, compensation
The everyday life	Keeping a daily rhythm Filling out the time with occupations
Internal capacities	Having good physical strength/ being healthy Having a good mood Having a will to manage daily life without help Accepting the situation as it is
External support	Support from family Support from others A good environment

Table 6. Themes from comments to question 3.

All comments relevant to the themes are organised in a matrix (See app. 10).

<u>Adaptation</u>

Making a plan and continuing the favourite activites is one way of adapting

> *I am handling my incontinence through good planning. I keep going out. I become very quickly tired - for instance if I should cook. So I go out to eat*

Another way is learning about the disease and coping well

> *I have learned the necessary precautions to protect my weak hip – everyday I go for a long walk.*

The everyday life

An overwhelming part of all comments deal with occupations in everyday life. As seen in the comments to question 1 on how everyday life is functioning, the daily doings make a structure for the day and fill out time. Being able to continue usual activities is emphasized as a way of handling troubles and avoid being bored

> *With all my doings the days are running so quickly. I am never bored.*
> *I prefer to manage without help. And it makes time pass so well.*
> *Everyday I go for a walk*

Internal capacities

In these comments participants are grateful and give praise to their good health, good mood, or other personal capacities

> *I manage because of a great portion of stubbornness*
> *I think I am an easy-going, happy kind of person.*
> *I am in a good mood and I talk with people*

Managing independent of help is mentioned repeatedly.

> *I manage everything by myself.*
> *I have a strong will. I wish to manage on my own*

Or accepting things as they are

> *I shall never be able to walk again, they told me. Now I have accepted it*
> *Little by little I have become pleased with my new apartment.*

External support

As a primary source of social support the family is mentioned: wife, husband and children.

> *I can always call my son Per if I need help*
> *I manage because of help from all my children. Without them I would be very much alone*

My wife and I help each other. We hope to stay in our own house

The place of living is mentioned – as a place that gives activities or as the place participants feel secure in and wish to keep staying in

We hope to keep staying in our own house
I am satisfied with my house and garden. I always have things to do.

Another dimension of keeping a house is mentioned. For several old people houses may be a burden – too difficult to keep and difficult to move away from.

It is difficult to manage the house, but I have not got the strength to move

Beside family and a good house, food delivery and meeting other people are mentioned as help to manage everyday life.

I can go downstairs to eat (institution) and sometimes I go out.
I am involved in many activities in the day centre

Précis of the results

The focus of this study is everyday life and the perceptions of managing loss of activities. Participants mostly describe a change in activity level due to being slower and more tired but also due to decrease in physical abilities, or poor environmental or social conditions. Occupations can give quality to the everyday life and play an important role in filling out the time. However the amount and nature of the daily activities must balanced well, otherwise stress and feeling of failure or deprivation can occur. Great individual variations appear in the need for activity, but especially emphasised are daily occupations in and around the house and the quality of going out. Individual

differences are seen in the ability to accept and to handle change in everyday life. A strong association is found between satisfaction in everyday life and adaptive competencies. The satisfied frail 85-year-old participants – labelled ’master survivors’ – manage their situation by the use of both adaptive strategies, by an everyday structure, and by internal and external capacities.

Discussion

The study aimed to get knowledge of how everyday life functions for frail old people and attempts to deepen the understanding of factors related to successfully mastering changes in their daily lives. Comments from interviews with 187 85-year-old people persons are used as a base for discussion of the results and from these, 91 participants represent a selected group of "master survivors", who express satisfaction in everyday life *despite* physical dysfunctions.

Five themes that emerged from successful mastering of changes will be discussed:

- Upholding a structure through everyday occupations
- Seeing a decreased level of activity as an active choice
- Occupational performance and participation
- Staying in control and connectedness
- Learning as an addition to adaptive strategies

Upholding a daily structure through everyday occupations

Among 85-year-old and frail people who actually experienced a decrease in daily activities, the existence of a formal or informal personal structure of the day in time and space was mentioned in many of the comments. Time and occupation seemed to be closely related. Occupations filled out the time and

acted as elements creating the rhythm of the day. It was demonstrated that time passes quicker when one has something to do, and that time may also be as well as too short as too long in relation to occupation. If occupation did not stimulate or challenge the individual resources, the 85-year-old frail participants felt bored. Balances between too big or too small challenges and between activity and rest should be carefully balanced. It seemed as if the equlibrium of daily structure tends to break down easily: If participants for example were in pain, felt dizzy, had a bad eye-sight or were caregivers for a sick spouse, increased demands could easily provoke stress.

As to the study of old people it is common knowledge that for old and frail people a complexity of strains may reinforce each other. Attention to this phenomenon is first of all given in relation to diseases and psychological strain. However, the findings of this study point to the importance of keeping a daily structure in everyday life through occupational challenges that are, as described by Csikszenthmihaly (1993) "just right". This is in line with conclusions from gerontology research using an everyday life perspective as theoretical framework (Swane (1996), Nygård, Borell, and Gustavsson (1996), Hasselkus (2002)).

In the interviews the participants often expressed that getting help might cause a dependency on a time structure that was set by outsiders. Their personal rhythm of day would be disturbed. It would be interesting to investigate further if the preservation of a personal daily structure were actually the background for those frail 85-year-old participants who were

satisfied in their daily lives, despite being dependent on public help. If this hypothesis might be confirmed, it might represent one explanation of why some users of home care services are satisfied and others not. This would fit well into the Danish Social Service Act (Socialministeriet, 2003) where autonomy and influence on own circumstances are emphasised. Out of this study a recommendation could be that providers of service and care to frail old people should always consider and discuss with the old people how their services will influence the personal balance of everyday occupations and the actual daily rhythm.

Seeing a decreased level of activity as an active choice

In the process of ageing with physical frailty a decrease in activities was a reality for the great majority of the 85-year-old people, and some connection is seen between decreased activity level and not expressing satisfaction in everyday life. From the comments it appears that the satisfied participants are more physically active and their days are filled with more activities.

Participants mostly said that they had become slower and most often felt tired – and that the daily chores took longer time to perform. Tiredness was mentioned most consistent in the group of not satisfied participants, and most frequently the fact of being slow was mentioned by the satisfied participants. Avlund (2001) suggests that the group of not satisfied participants could be

seen as having an increased risk of disability and mortality since fatigue is a strong, early predictor of a coming disease.

From a gerontology angle it is not surprising that everything takes longer to perform. The sensory-motor skills and cognitive abilities are known to influence speed (Swane CE, Blaakilde AL, Amstrup K (2002). The older you get, the longer time you need to perceive, to react, to move. Apparently, for quite a great number of the 85-year-old participants, the necessary activities of daily living such as dressing, shopping, cleaning in and around the house take so much energy and time that this actually seems to occupy most of their day. There was no time or energy left for personally important activities. It seems that the daily chores gradually push aside other important activities, simply because they take so much energy and time. However, one might also see this situation as a choice taken after sincere consideration. The comments give support to both points of view. The group of frail 85-year-old people, who had actively chosen to let the daily activities fill their days, described with pride that they always had things to do; how they had created a daily rhythm and never felt bored. Many added as very important that they could still manage on their own and were independent of help. Mostly, these "good copers" came from the group of satisfied participants. From the group of not-satisfied, many comments were about loss of activity or feelings of failure. This may be seen as a consequence of losing important activities without being able to interfere or make active decisions.

It is a cultural norm for old people in the Western world to be able to stay active and independent (Keith et al 1994). As a consequence of that old people with physical disabilities often struggle hard to avoid asking for help (Hansen et al 2002). In two Scandinavian population studies (Hillerås et al 2000, Johannesen, Pedersen & Avlund 2004), a strong correlation between reduced well-being, less satisfaction with daily lives and high dependency have been found.

From an occupational therapy perspective, it might be seen as worrying that the value of independence is so strong that frail old people prefer to stay independent of help and only do basic daily activities, instead of accepting some kind of help, saving their energy for personally important activities. This argument rests on findings within occupational science that creative and personal occupations in general increase well-being and promote health (Wilcock (1991), Jackson (1996), Rudman(1997), Legarth (2001), Borell et al. (2001)). In a longitudinal Danish study Legarth (2001) demonstrated that having an important activity was significantly related to good self-related health and well-being: 75-year-old people (from the same birth-cohort as this present study) who had ceased with their most important activity, risked losing life-satisfaction, being more tired, and becoming dependent on help at the age of 80 years.

Similar to the findings of Jackson(1996), Borell et.al. (2001:311) add choice as an important dimension in well-being. As part of a larger study of

occupational therapy for old persons living in the community, they conducted interviews with 21 old citizens (70 to 92 years of age) with functional impairments, in order to explore the values and meanings of having a daily occupation. Their findings indicated that

> *"the loss of positive belief in enjoyable occupations can be a sign of reduced hope in late life."*

Aware of not presenting an active lifestyle as an ideal for old adults in general, Borell et al. stressed the importance of distinguishing between

> *"whether an older adult has made a conscious choice to withdraw from some aspects of occupational life and when a person feels a sense of loss related to having too little occupational choice".*

The “master survivors” give priority to independence and stay satisfied despite changes in occupational life - they have chosen what is most important - as Townsend et al. (2002) argue.

The value of independence and the need of important activities are both strong forces. When frail old men and women have not got the power to fulfil both, it seems as if independence is chosen by the satisfied participants as more important than the need of continuing an important activity. They have made a conscious choice and remain satisfied, even though everyday life tends to become more concentrated on the basic activities of daily living and less on participation in society and personally meaningful activities. Two sets of explanations may be given to this finding.

One explanation may be linked to the theories of gerotranscendence (Tornstam (1992), Katz S (2000). This theory rests on the fact that with

growing age more old people give up an active, social life (Legarth (1995), Johnson and Barer (1997)) and it describes how old people choose to withdraw from society and spend their days reflecting on their lives and their past. The findings of this study confirm that old people can be satisfied despite a decrease in occupational level and limited participation in society.

Maslow's model (1962) describing individual needs as organised in a hierarchy, may be an alternative explanation of why frail 85-year-old people feel satisfied despite loss of meaningful activities. Basic physiological needs such as food, toiletry, keeping clean and dressed must be fulfilled before more social needs and personal development are given priority. This model of human needs is believed to be valid for all human beings, whereas the ways the needs are fulfilled, will be influenced by socio-cultural values. In our Western societies the value of autonomy and independence is so strong that strong copers accept that most of their time is spent managing their basic daily occupations, independent of help. According to the anthropological studies of Keith et al. (1994) this is contrary to what old people in Eastern cultures would do. Within certain group cultures, old people find value and pride in having their families take care of them.

Occupational performance and participation

Major individual variations appeared in descriptions of activities that had been given up: Creative activities as well as housework, reading literature or

social activities. One expression from the participants very precisely illustrated the complexity between decrease in functional ability, important occupation, time and well-being:

> *Since I cannot read any more, I feel a little lonely. Earlier I had no problems, time passed so easily*

Because of problems with her sight, an occupational deprivation occurred which made time pass slowly and loneliness escalated. This participant started to suffer from loneliness, although no sudden social loss had occurred. The study of Day (1991) to some degree points to the same as a trouble spot: the old women in her study connected successful ageing with the capacity to enjoy life and feared having impairments such as cataracts, as it might prevent them from doing things for themselves such as reading or driving to shops or pursuing individual hobbies or interests.

When comparing changed occupational levels in the two groups of frail 85-year-old people, the most conspicuous difference was that 27% of the dissatisfied participants had given up going out, compared to only 7% in the group of satisfied participants. This difference is notable regarding the fact that going out was emphasised as a quality when the participants described how their everyday life was functioning. As for reasons why going-out had ceased, participants mentioned being afraid of going out alone or being afraid of going out in the dark, having no-one to go out with, remembering bad events, missing driving their cars, feeling dizzy, having pain, and a poor eye-sight.

Why does the group of not-satisfied 85-year-old participants cease to go out more frequently than the group of satisfied? Arguments might be differences as to levels of functional disability. However, the statistical analyses in Study 1 showed no significant association between functional ability (mobility) and satisfaction in everyday life, and the two groups of frail 85-year-old participants were seen as having the same level of mobility. Nevertheless, when studying the comments, a difference appears between everyday occupations in the two groups. This probably exemplifies how different research and measuring methods give different insights and outcomes. In the quantitative analyses the differences between the satisfied and not satisfied participants were measured by mobility performances to be identical. In the qualitative approach, however, a difference in occupational performances between the two groups of participants was revealed.

In general, much attention is paid to physical disabilities as a risk factor for dependency and limited participation in society for old people.

The findings of this study elucidate that a broad range of frailties (physical, sensory, psychological and social) may limit occupational performances and become a strain on active life in the community.

In the International Classification of Functioning, Disability and Health (WHO 2001) it is considered a challenge to understand health and disability from a broader angle. The ICF-perspective focuses on “life”, i.e. how people live with their health conditions and how they can achieve an active, full life in the community. ICF puts all disease and health conditions on an equal

footing irrespective of their causes, and takes into account the impact of social and physical environment on a person's functioning. In ICF three dynamically interacting elements: Body functions, activities, and participation in society, are regarded as parts of optimal functioning. As one of 191 countries across the world, Denmark has accepted ICF as the international standard to describe and measure health and disability. It would be valuable to investigate further if the complexity of dysfunctions is acknowledged when describing the situation for frail old Danish citizens and if local support is organised, faithful to ICF and its main elements of functioning.

Staying in control and connectedness

In the present study a strong correlation is seen between satisfaction in everyday life and frail 85-year-old participants expressing a sense of control and self-determination in everyday life. In contradistinction, dissatisfaction in everyday life is correlated to feeling stress, occupational deprivation, boredom, or a sense of failure in relation to changes in everyday life. Participation in decision-making and a sense of control is known to have an impact on well- being and health for old as well as for young people (Wilken et al. (2002), Rowe & Kahn (1987), Wilcock (1998), Jackson (1996), Csikszenthmihaly (1975)). From the study of old remarkable survivors, Johnson and Barer (1997) question if the need for an active, social life and independence also covers the group of the oldest old people. This issue is extraordinarily important as some evidence point to the risk of losing control

with increasing age. Wolinsky et.al. (2003: 212) tested for the association between age and the sense of control. Using data from an American longitudinal study of health-related quality of life in a large sample of chronically ill, old persons, the conclusion was that

"*as older adults proceed through the life course, they have fewer control-enhancing experiences and encounter more control-restricting circumstances"*.

The need for staying in control, also for the oldest old, is confirmed by this study. The comments from satisfied participants paint a picture of 85-year-old people being in control and making decisions about everyday life and managing well alone although feeling slower. In the group of not satisfied participants, however, an overall pattern of the comments concerns being dependent on help, feeling unable to control the situation and feeling lonely. This pattern is in line with the findings of Hillerås et al. (2000) where a tendency was found between well-being and focusing, not on limitations, but on what participants were capable of doing and on positive connections to other people.

Rowe & Kahn (1987) found evidence of a positive influence of social support / or connectedness and autonomy to health and life satisfaction. This, as well, is recognised in this study.

From the quantitative data we can tell that the two groups of participants have the same level of physical dysfunction (mobility) and the same status concerning living alone, but that the group of satisfied participants have

significantly more friends (See App. 2). In the comments, a sense of control matches with satisfaction in everyday life, and the feeling of loneliness matches with dissatisfaction. Methodologically, this can be seen as an example of circular conclusion: participants who are not satisfied are more likely to feel lonely - and participants who are satisfied are more likely to enjoy their everyday life. Nevertheless, these observations might be predictors of morbidity or mortality. When the population-cohort is re-investigated in the year 2004, it will be possible to test if a relation may be seen between mortality or morbidity and lack of satisfaction in everyday life at the age of 85 years. And if so, this will be an evidence-based argument that expressed satisfaction in everyday life is a measure to be taken very serious when organising help and support to frail old people of that generation.

Learning as an addition to adaptive strategies

Comments to the question "what has changed?" are analysed for the occurence of adaptive strategies as proposed in the model of Baltes and Baltes (1991). The elements of the model - selection, optimisation and compensation - turn out to be strongly connected to satisfaction in everyday life. This finding can be seen as a confirmation of the model, that adaptive competences can help staying satisfied in the process of ageing, with frailty and with changes in everyday life.

When participants describe how they actually handle the situation, good advice is given. The frail 85-year-old people themselves point to adaptive

strategies that can be related to selection, optimisation and compensation, and they add *learning* as another strategy. Several participants had searched for information on how to cope with their diseases, or they had changed lifestyle in accordance with general health care advice.

American occupational therapists have studied adaptive strategies among as well frail as healthy old people and offer a supplement to our findings. In the study of Jackson (1996), frail old American informants considered adaptive strategies most influential in managing meaningful lives, especially adapting to change and loss. And in the Californian Well Elderly Study by Clark et al. (1997) healthy old participants living in the community were able to re-design their lifestyles through a preventive occupational therapy programme. In a self-reflection process participants analysed and discussed their own occupational patterns and modified their lifestyles to maximise productivity and satisfaction with life. The study was a randomised, controlled study and seen in a methodological perspective, the results convincingly demonstrated improved health and reduced age decline. Together, these studies and the present one offer evidence that adaptive strategies can promote health and well-being among old people and that it is possible to learn adaptive skills. This is of interest for practice and policy-makers. Evidently a preventive occupational therapy intervention oriented toward learning adaptive strategies would be of benefit for old citizens in general as well as particularly frail old people.

It should be noted, though, that even in the group of master survivors not all of the comments may be interpreted as adaptive strategies. Some comments just described how occupational life had changed, not giving dues to how and why. Other types of comments were pointed to strains from outside such as poor health, a sick spouse or friends that died. This illustrates that mastering changes successfully dwell both upon the adaptive competence of the person and on the influence of the society as each is affected by the other.

All in all this study has illustrated several aspects of mastering frailty and changes in daily life. Also, the findings seem to complement existing knowledge in this area (Avlund (1999), Baltes & Baltes (1991), Clark et al. (1997), Csikszenthmihaly (1993), (Day (1991), Fisher (1995), Hasselkus (2002), Hillerås et al. (2000), Jackson (1996), Legarth (2001), Rowe & Kahn (1987), Rudman et al. (1997), Wilcock (1998)) and have created associations that deserve further investigation.

The methodological approach of integrating open-ended questions in a quantitative survey helped better understanding of how life is experienced by the group of frail 85-year-old people. As an example, the quantitative findings emphasized the importance of being occupied as usual and the qualitative accounts further elucidated the complexity that exists between impairment, occupation and a daily structure and its importance for a positive feeling of well-being.

However, it is important to underline, that although the sample is quite big, this investigation is not representative for all old people and that the cross-sectional design of the analyses limits the possible inductions from the findings. Although participants agreed with the way comments were referred, one must be aware as a bias that all comments are collected by an occupational therapist who also performed the analyses (Silverman 2001:132). Still, from an occupational therapy perspective it is interesting that many of the findings link well-being with an everyday life balanced through occupational performances and personal choices.

Conclusion

The Danish Social Policy (See appendix 1) focuses on supporting independent living, self-determination and continuing usual activities, meeting the values of most old Danish citizens. With the growing number of old people more will risk to live a life with frailty, and this will be a risk particularly among the group of the oldest old people. At present there is a lack of knowledge concerning the coping abilities of frail old persons experiencing strain such as changes in everyday life due to frailty.

This research has been focused on frail 85-year-old people successfully mastering changes in their daily lives. Among questions raised were:

- Which activities are given up and why?

- How do these 85-year-old 'master survivors' experience the changes in their daily lives?
- And what resources and strengths help them handling their everyday life?

A mixed methodology has been chosen, using quantitative and qualitative strategies in analysing the data. Due to the cross-sectional design of the study, analyses do not aim at finding cause-effect relationships, but instead search for patterns and differences in the ways changes are mastered.

First, a literature review has been conducted, searching for studies on ageing successfully, on ageing, occupation and well-being, and on ageing with frailty. The goal of preventive medicine is to prevent or delay chronic illness and among the most used key markers of successful ageing, are long lives without illness and disability. From a sociological perspective, the necessity of regarding ageing as a dynamic process of persons interacting with society is stressed (Featherman (1990), Torres (1999)). Psychologists underline the individual capacity to cope with life (Fromholdt (1998), and a model of successful individual adaptation to changed conditions involving three components, selection; optimisation; and compensation was developed (Baltes and Baltes 1990). Occupational scientists accentuate that meaningful occupation has a positive impact on health and well-being (Wilcock 1998a).

From an occupational therapy perspective, it is noted that many of the findings and discussions link well-being with being active; engaged in life;

and having a sense of purpose (Fisher (1995, Hasselkus (2002), Rowe & Kahn 1997). Also a need of activity and control is found to be crucial (Csikszenthmihaly (1975), Rudman (1997), Schultz (1976), Johnsen and Barer (1997), Wilken et al. (2002)). Further, that a decline in personally important activity lead to a decline in well-being (Day (1991), Jackson (1996), Legarth (2001)).

More studies find independence linked with pride and satisfaction (Hagberg (2002), Hansen et al. (2002), Johannesen, Petersen & Avlund (2004)). Related to adapting well to changed conditions was the level of education and general outlook on life (Clarke (2003), Hillerås (2000)).

Excepting the discussion by Johnson & Barer (1997) whether a decreased need of activity is connected to a normal ageing process, there is little knowledge concerning the experiences of frail old people who have reduced activities in their everyday lives.

Secondly, comments from the interviews of 85-year-old people in their homes are analysed.

The study population was a sample of 187 frail 85-year-old persons, defined by limited mobility performances (Avlund (1993, 1996) and divided into two groups (See app. 2): 91 participants who expressed satisfaction in everyday life, and 96 who did not. No significant differences were found between the two groups according to gender or physical disability. Data were comments from open-ended questions collected by an occupational therapist. Comments are

analysed as well for statistical correlation as by coding the comments into categories, using the concepts of successful ageing and occupational science as guidelines. Furthermore, the narratives (Silvermann 200:136) are assessed using a phenomenological process of analysing (Malterud 1999), searching for themes and patterns of the ways 85-year-old people perceive and manage changes.

When asked how their everyday lives were functioning, the vast majority of participants mentioned a decrease of activity compared to earlier in their lives. Many had become slower and some felt tired or had limited strengths. Participants saw keeping a daily structure as important, often through metering out their everyday occupations. If changes in activity level were experienced as deprivation, as being overloaded or bored, it was significantly associated to dissatisfaction, whereas satisfaction in everyday life was connected to sense of control and use of own resources. Participants were striving to manage their lives without help and valued independence. Daily occupations in and around the house and the quality of going out were especially emphasised. Individual differences and complex interactions were demonstrated; As an example being a widow would be perceived as well as a strain as a relief, and a feeling of loneliness could escalate, not as lack of network, but as a result of deprivation from an activity such as reading. Despite the same level of mobility problems, abroad range of frailties hindered the dissatisfied participants from occupational performances.

The satisfied frail 85-year-old participants – labelled ’master survivors’ – more often than the dissatisfied participants, managed their situation by using as well adaptive competencies as by keeping a daily rhythm. The 'master-survivors' mention internal capacities such as a good mood or acceptance of the situation and, as external supports, family, friends and the living conditions.

The survey measures opinions from a large group of the oldest of old people, but is not representative for all 85-year-old Danish persons or old people in general. It has been possible by analysing the comments to get a glimpse of how everyday life changes in the process of ageing with frailty. Important individual differences appear, but some patterns were found that illustrate ways of mastering the situation.

The findings of this study point to the importance of keeping a daily structure in everyday life through balanced occupational challenges. It is been discussed if there is a connection between wishing to manage independent of help, and a fear of having the daily structure and sense of control disturbed by the helping system.

The findings of this study also confirm that old people may be satisfied, despite a decrease in occupational level and limited participation in society. Strong copers seem to accept that most of their time is spent managing their basic daily occupations independent of help, and it is discussed if the value of autonomy and independence is stronger than the need for active participation in other important activities.

Measuring occupational performances disclosed more differences between the two groups of participants than using mobility performances, and the use of the WHO concept of functioning "ICF" is discussed. It is furthermore discussed if asking about the satisfaction of everyday life would serve as a measure, assessing the need of help for old people of that generation.
Finally, the relation found between adaptive competencies, which included learning, and satisfaction in everyday life is discussed. Adding our findings to the ones of Clarke (1997) it is seen as possible to learn adaptive strategies in old age, and preventive occupational therapy programmes, oriented towards learning adaptive strategies is proposed.

Findings from this study could be used in professional practice related to issues such as:

- Paying attention to the value of upholding a daily structure and sense of control, when giving support or care to old people
- Acknowledging the fact that a decision to cease an important activity may be taken to stay independent of help
- As adapative competencies are associated with health and well being, a preventive occupational therapy intervention oriented toward learning adaptive strategies would benefit old citizens in general as well as particularly frail old people.

Furthermore, the findings of this study hopefully may inspire:

- Studies on the adaptive abilities of the society, meeting frail old people.

- Studies concerning the relationship between satisfaction in everyday life and professional support, organised to support the structure of everyday life and a sense of control
- Studies of how the concept of ICF may be used as a tool of assessing the complexity of strains that limit occupational performances
- Studying if the group of satisfied 85-year-old participant five years later have had a lower morbidity than the group of not satisfied participants.

With a focus on the relationship between handling changes in everyday life and satisfaction among the oldest old and frail people, this work touches areas that are not well published - but it endorses many of the studies used. The comments of a group of frail 85-year-old people have opened up to a deeper understanding of internal and external factors related to frail older people, who are successfully mastering changes in their daily lives. Also, differences of patterns have appeared in handling changes among the frail 85-year-old people. Speaking generally, old people in general have a decreased activity level but demonstrate a desire of continue a daily structure and to be independent of help. Many of the findings link well-being with occupational performances and personal choices. The frail 85-year old participants have demonstrated their ability to manage changes in everyday life as well by adaptive strategies as by support from others and from a good physical environment.

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