

Research Article

Exploring Subjective Well-being in Older Age by Using Participant-generated Word Clouds

Linden Douma, MSc,^{*,1,2} Nardi Steverink, PhD,^{3,4} Inge Hutter, PhD,¹ and Louise Meijering, PhD¹

¹Department of Demography, Faculty of Spatial Sciences, University of Groningen, the Netherlands. ²Healthy Ageing, Population and Society, University of Groningen, the Netherlands. ³Department of Sociology, Faculty of Behavioural and Social Sciences, University of Groningen, the Netherlands. ⁴Department of Health Sciences, University Medical Center Groningen, University of Groningen, the Netherlands.

*Address correspondence to Linden Douma, MSc, Department of Demography, Faculty of Spatial Sciences, University of Groningen, PO Box 800, 9700AV Groningen, the Netherlands. E-mail: l.e.douma@rug.nl

Received March 23, 2015; Accepted June 25, 2015

Decision Editor: Barbara J. Bowers, PhD

Abstract

Purpose of the study: Previous research has overlooked the heterogeneity in older adults' personal conceptions of subjective well-being (SWB), by not taking into account intradomain differences in the conceptions of SWB for different groups of older adults. The aim of this article is therefore to explore (a) older adults' own views on which aspects, categorized under domains, are important to their SWB and (b) which domains and aspects are important to older adults in different contexts and with different characteristics: to men and women, of different ages, and in different housing arrangements.

Design and methods: Sixty-six older adults (aged 65 and older) participated in our study. We asked the participants to freely nominate aspects of SWB that are important to them, using participant-generated word clouds as our exploratory, qualitative data collection method. The data were analyzed using qualitative inductive content analysis.

Results: We found 15 domains based on our participants' conceptions of SWB. The multidimensional domains of social life, activities, health, and space and place were most important to our participants. The domains and aspects were defined and prioritized differently by different groups of participants.

Implications: SWB should be studied as a multidimensional, individualized, and contextualized process to generate meaningful empirical information for researchers and policymakers.

Keywords: Lay-view approach, The Netherlands, Assisted-living, Community-dwelling, Qualitative research

Subjective well-being (SWB) is a field of academic research that aims to explain individuals' global evaluations of their lives. A life is considered to be going well only if the individual who lives this life evaluates it positively. SWB is an important goal of human beings and, increasingly, the pursuit of SWB is a common rationale behind (inter)national and local policies as well as research agendas (van Hoorn, 2007). As a result of the world-wide trend of population aging, assessing SWB in later life has gained substantial attention in research agendas as well as in economic, health,

and social policies in today's aging societies (Diener, Lucas, Schimmack, & Helliwell, 2009; Forgeard, Jayawickreme, Kern, & Seligman, 2011; Stiglitz, Sen, & Fitoussi, 2009).

The conceptualization of SWB has been debated extensively, which has resulted in substantial theoretical and methodological advancements in the field of SWB (Diener, Scollon, & Lucas, 2009; Ryan & Deci, 2001; Vanhoutte, 2014). In evaluating their level of well-being, individuals are guided by their personal conceptions (Sastre, 1999), which are in turn based on their individual characteristics,

value and motivational systems, personal experiences, and sociocultural and sociospatial circumstances (Campbell, Converse, & Rodgers, 1976; Diener, Scollon, et al., 2009; Diener & Suh, 2000). Hence, although the pursuit of well-being is universal, SWB is chiefly a subjective, individual-level experience. In most theoretical models and many measures of SWB, however, the conceptualization of SWB stems from researchers' predefined conceptions, even though it is unclear to what extent these views correspond to the personal conceptions of the (older) individuals concerned (Borglin, Edberg, & Hallberg, 2005; Bowling & Gabriel, 2007; Cosco, Prina, Perales, Stephan, & Brayne, 2013). To minimize the danger that theoretical models and measures are solely based on the conceptions of researchers and to ensure that developed models and measures have relevance to older adults and reflect their values, several authors have therefore advocated employing a "lay-view approach" to studying SWB of older adults (Borglin et al., 2005; Bowling, 2007). A lay-view approach takes into account older adults' own views of what constitutes SWB, embedded in the complexity of their individual characteristics, lived experiences, perspectives, and circumstances, without imposing preconceived concepts (e.g., Bowling et al., 2003; Jopp et al., 2014). Previous research shows that (older) individuals' personal conceptions of SWB often include a much wider variety of dimensions than are considered in most researcher-driven theoretical models (Cosco et al., 2013; Jopp et al., 2014; Martin et al., 2015; Minney & Ranzijn, 2015).

There are a few studies that have explored older adults' own understandings of SWB and related concepts, such as quality of life. These studies used different data collection methods (quantitative and qualitative), had different study populations, and were conducted in different countries. The studies that used a quantitative approach include Bowling and Gabriel (2007); Farquhar (1995); Sastre (1999); Westerhof, Dittmann-Kohli, and Thissen (2001); and Wilhelmson, Andersson, Waern, and Allebeck (2005). The studies that adopted a qualitative research design include Bergland and Kirkevold (2006); Borglin and colleagues (2005); Jopp and colleagues (2014); Puts and colleagues (2007); Richard, Lafort, Dufresne, and Sapinski (2005); and Ward, Barnes, and Gahagan (2012). The multidimensional set of domains found by the reported studies to be constitutive of SWB of older adults were quite consistent: social relationships, physical and psychological health, activities, home and neighborhood, personality characteristics, mobility, finances, religion, and autonomy and independence (Bowling, 2007; Fry & Ikels, 2011).

With regard to individuals' personal conceptions of SWB, however, several authors have argued that these are likely to change over time and can be adjusted to given personal and contextual circumstances, such as increasing functional limitations or becoming a resident in a nursing home (Bergland & Kirkevold, 2006; Borglin et al., 2005; Bowling & Windsor, 2001; Browne et al., 1994; Westerhof

et al., 2001). Thus, treating older adults as a homogenous group masks potential variations in personal conceptions of individual older adults. This might result in a set of domains that is unlikely to have equal significance to different individuals (Bowling et al., 2003; Farquhar, 1995; Wilhelmson et al., 2005). Some of the previously listed studies on personal conceptions of SWB and related concepts tried to account for this heterogeneity, predominantly by examining age-related differences and/or gender-related differences at the domain level. Their conclusions are mixed: some studies reported differences in what was perceived to be important to well-being among older adults of different ages (Farquhar, 1995; Westerhof et al., 2001; Wilhelmson et al., 2005) and gender (Wilhelmson et al., 2005). Others concluded that older adults' conceptions of well-being are similar by age (Jopp et al., 2014; Sastre, 1999) and gender (Bowling & Windsor, 2001; Jopp et al., 2014).

Our study builds on this previous work in two ways. First, previous studies may have overlooked subtle *intradomain differences* in conceptions of well-being, by trying to detect and describe the differences in personal conceptions of well-being for older adults of different ages and gender at the *domain level*. This implies that the—broad—domains have little individual relevance to individual older adults (Borglin et al., 2005; Browne et al., 1994). Therefore, studying SWB at the intradomain (i.e., aspect) level will uncover previously unknown differences in conceptions of well-being across groups of older adults of different ages and gender.

Second, to the best of our best knowledge, no empirical study has been conducted yet on how older adults in different housing arrangements perceive SWB. However, studying different housing arrangements is important, because the move from a community-dwelling to an assisted-living facility is a major life transition, involving a new daily environment, changed everyday life, and process of individual adjustment (Bergland & Kirkevold, 2006; Hvalvik & Reiersen, 2011; Kahn, 1999). Accordingly, several authors have argued that conceptions of SWB of older adults living in assisted-living homes are likely to differ from community-living older adults living independently at home (Bergland & Kirkevold, 2006; Gabriel & Bowling, 2004). To date, the few studies using a lay-view approach to study older adults' personal conceptions of SWB and related concepts in assisted-living arrangements, predominantly nursing homes, indicate that the domains found are very similar to the domains found for community-dwelling older adults (Bergland & Kirkevold, 2006; Borglin et al., 2005). In addition to the domains found with community-dwelling older adults, the domains of the residents' mental attitude toward living in the nursing home and quality of care and caregivers were also important for nursing home residents.

All in all, previous research has overlooked the heterogeneity in older adults' personal conceptions of SWB, by not taking into account intradomain differences in the conceptions of SWB for different groups of older adults. Therefore,

the aim of this study is to explore (a) older adults' own views about which aspects, categorized under domains, are important to their SWB and (b) which domains and aspects are important to older adults of different ages and genders, and who live in different housing arrangements.

Design and Methods

Research Approach and Data Collection

Because our goal is to gain a better understanding of our participants' views by creating an open space for generating aspects of SWB, we have chosen to apply a qualitative research approach. By applying a specific set of qualitative methods from an interpretive paradigm, a researcher can gain a deeper and more detailed understanding of participants' perspectives on a certain subject or situation (Hennink, Hutter, & Bailey, 2011; Strauss & Corbin, 1998). We designed an exploratory qualitative method, which we call "participant-generated word clouds." Our word cloud method is a combination of relevant features of other qualitative techniques, such as free listing, mind mapping, diagramming, and rank ordering (e.g., Kindon, Pain, & Kesby, 2007; Schrauf & Sanchez, 2008), and fits within a toolbox of participant-generated visualization methodologies (e.g., Guillemin & Drew, 2010; van der Riet, 2008). Participants were given a blank piece of A3-format paper with a gender-neutral cartoon doll printed in the middle. The interviewer (L. Douma [first author]) explained to the participant that the doll symbolized the participant and asked him/her to write down all aspects that she/he considered to be important for his/her personal well-being on small-size yellow sticky notes (4 by 5 cm) and to arrange these on the paper. Except for the focal subject (SWB), participants were free to choose the content, number, order, and arrangement of the sticky notes. The interviewer imposed no time constraints on the participant and wrote when requested by the participant. This study is part of a larger study on SWB of older adults, in which we also obtained detailed information about various participants' characteristics (e.g., education level, marital situation).

We strove for empirical groundedness of the research data and findings, so that our "knowledge claims correspond to the reality of those to whom they pertain" (Liebenberg, 2009, p. 443). This approach should result in what Lincoln and Guba (1985), within the naturalistic paradigm of trustworthiness, described as "credibility." Using participant-generated word clouds enhanced the groundedness of the research data in two ways. First, by providing the participants with the opportunity to list and visualize meaningful aspects of SWB and to express those aspects using their own words, the research data are by definition grounded in the understandings and realities of the participants. Second, the word cloud exercise does not require an immediate response, but it allows participants to work at their own pace and to take time to reflect before responding. This process is intended to engage different

levels of consciousness, and thus to encourage more reflection than conventional verbal research methods typically do (Guillemin & Drew, 2010).

Ethical Considerations

The ethical committee of the Faculty of Spatial Sciences, University of Groningen, approved the study. L. Douma provided the participants with detailed information about the research. She also ensured the participants that all of the information shared would be anonymized and treated confidentially, that only the main researchers (authors) would have access to the original data, that all of the data would be stored securely in a locked and secured computer database; all of which was done accordingly. Oral consent of the participants was obtained and audio recorded.

Participant Recruitment and Participants' Characteristics

Our study was conducted in the northeastern Netherlands. L. Douma contacted local gatekeepers (see Table 1 for an overview).

Initial contact was made by e-mail or telephone and was followed by face-to-face visits if requested by the gatekeeper. L. Douma provided the gatekeepers with information about the research and discussed ways to gain access to older adults. The participants had to be at least 65 years old. At the start of the fieldwork period, which lasted from October 2012 to October 2013, 65 years was the official retirement age in the Netherlands.

Initially, L. Douma applied six different recruitment strategies. Local gatekeepers played an intermediary role in the recruitment process. As the goal was to explore the perceived aspects and domains of SWB among older adults of different ages and genders, and in different housing arrangements, a wide range of participants were recruited. Participants living independently in their own (senior) homes were considered community-dwelling participants, whereas all participants living in housing facilities with in-home assistance (i.e., service flats, sheltered accommodations, and nursing homes) were considered assisted-living participants. In the context of this study, senior homes are age-restricted community dwellings, intended for people aged 55 and older, in which no in-home services are provided.

After reviewing the characteristics of the recruited participants halfway the recruitment process, we noticed that most of the participants were community dwelling. To achieve the desired level of diversity of experiences L. Douma started to focus on recruiting older adults living in assisted-living arrangements, including nursing homes, sheltered accommodations, and service flats, which are privatized senior apartments providing meal and health care services (see recruitment strategies 7 and 8 in Table 1). L. Douma was notified by the staff of nursing home I and

Table 1. Overview of Applied Recruitments Strategies, Characteristics and Roles of the Involved Gatekeepers, and the Total Number of Participants Recruited Per Strategy

Recruitment strategy	Recruited participants (number)	Involved gatekeepers (number)	Role of the gatekeeper
1. Personal visits to social clubs and sports clubs	4	Social worker (2)	Informed the researcher about upcoming meetings of clubs; introduced the researcher to the club members; and/or handed out information material.
	10	Club secretary (3)	
	3	Gymnastics teacher (2)	
2. Recruitment of visitors at a local event on health and health services	17	Social worker (1)	Informed the researcher about this event; arranged a stand for the researcher to display information material.
3. Advertising in local newspapers, bulletins, and on local websites	5	Municipal employee (1)	Published advertisement in local newspaper and/or on municipal website.
	3	Editorial staff (2)	
4. Local network of community volunteers visiting older adults	4	Municipal employees (2)	Introduced the researcher to volunteers in the network. Handed out information materials to older adults.
		Community volunteers (3)	
5. Displaying information material at public places	1	Staff members community centers and library (3)	Granted permission to display the information materials.
6. Snowballing	4	Not applicable	Participants asked others to participate as well.
7. Recruitment in service flat	10	Flat Council and	Permitted the researcher to deliver information materials to residents; arranged an introductory coffee morning for the residents.
		Director (1)	
8. Recruitment in nursing homes and sheltered accommodations	3	Head of nursing home I (1)	Permitted the researcher to deliver information material to residents; and/or published an advertisement in the monthly newsletter.
	12	Client Advisory Board and Director nursing home II (1)	

nursing home II of which residents were too ill, mentally or physically, to be included in the recruitment process.

During the fieldwork period, participant recruitment, data collection, and data analysis took place simultaneously. The sample size had not been defined in advance, but L. Douma continued data collection until she observed theoretical saturation by gender, age, and housing arrangement. Sixty-six individuals participated in the word cloud exercise. Table 2 shows the participants' characteristics. Of the 66 individuals, 65 agreed to be visited in their own homes. One participant chose to be interviewed in a public room in his apartment building.

Data Analysis

The number of sticky notes generated by our 66 participants varied from 1 to 13 per participant. L. Douma analyzed the data with the help of the qualitative data analysis software program ATLAS.ti. The digitalized word clouds were imported and analyzed by applying qualitative inductive content analysis (Elo & Kyngäs, 2008), also known as conventional content analysis (Hsieh & Shannon, 2005). Qualitative inductive content analysis allows researchers to explore a certain phenomenon based on the participants' perspectives, without imposing preconceived categories on the data. Hence, knowledge generated from the analysis is fully grounded in the data. Qualitative content analysis can

be confused with grounded theory analysis because they follow similar analytical procedures. However, whereas qualitative content analysis results mainly in the development of concepts, grounded theory analysis goes further, seeking to develop a theory by examining the theoretical relationships between concepts (Hsieh & Shannon, 2005). As the nature of our word cloud data allows for concept development only, we applied qualitative content analysis. Our analytical procedure consisted of three steps.

The first step was open coding of the word clouds. For example, the participant-generated words "social relations," "social contacts," and "social interaction" were all coded as "social contacts," because of their similar meaning. Overall, the word clouds contained 370 participant-generated words, which is an average of 5.6 per participant. Our open coding process resulted in a codebook containing 107 unique codes, which we refer to as *aspects* in this article.

In the second step of our analysis, we derived a set of categories (*domains*), from the list of aspects. We did this by assigning all aspects to higher-order domains. The name and definition of each domain were, as much as possible, based on participants' own words. The arguments for assigning certain aspects to particular domains were written down. For example, "garden," being a place, was assigned to the space and place domain. However, "gardening," being an activity, was assigned to the activities domain. We categorized pets under social life, based

on recent research showing that pets are often perceived as family members (Ryan & Ziebland, 2015) and similar to the categorization of Bowling and Gabriel (2007). The other domain contains five aspects that were difficult to categorize, such as weather. Fifteen domains were derived.

In the third step, we explored the relative importance to our (groups of) participants of both the domains and the aspects categorized under each domain. We did so by determining how often participants had mentioned each aspect under each domain relative to the overall number of words (370). Subsequently, we assessed the relative importance of each domain by summing up how often participants had mentioned all of the aspects assigned to that particular domain. For example, aspects categorized under the social life domain were mentioned by the participants 126 times and accounted for 35% of the total number of

370 participant-generated words. Based on these outcomes, we constructed rankings for all of the domains and aspects that featured in the participants' conceptions of SWB, both overall and for each group of participants

Results

A total of 15 higher-order *domains* were derived from our participants' word clouds: social life (e.g., children), activities (e.g., reading), health (physical and mental), space and place (e.g., living environment), independence (e.g., self-reliance), mobility (e.g., driving a car), financial situation, societal criticism (e.g., environmental pollution), political situation (e.g., freedom), personal characteristics (e.g., being positive), way of life (e.g., harmonious or varied lifestyle), other (e.g. weather), religion, health care and support (e.g., meals on wheels), and personal development (e.g., learning new things). Figure 1 presents these domains, their overall ranking, and their perceived relative importance (which is reflected in the font size).

The domain social life dominates Figure 1: aspects of social life were mentioned twice as often as aspects within the domains activities and health, which are second and third in the ranking. Aspects within the domain space and place were also mentioned relatively frequently by the participants, but less often than activities and health. The top four domains, led by social life, can be seen as most important to our participants. The much smaller font sizes of the remaining 11 domains indicate that they are less important to our participants.

Groups of Participants and Their Important Domains of SWB

When we compared the list of domains for each of the participant groups, we noticed both similarities and differences between the groups in terms of the relevant domains, and the ranking and the perceived relative importance of those domains.

First, we found that the aspects mentioned most frequently by all of the participant groups were related to

Table 2. Characteristics of the Participants: Number of Participants (*N*) and Proportion (%)

Characteristics	<i>N</i>	%
Gender		
Male	22	33.3
Female	44	66.7
Age group		
65–74 years	29	43.9
75–84 years	25	37.9
85 years and older	12	18.2
Marital status		
Married/partnered	34	51.5
Separated/divorced	4	6.1
Single, never married	1	1.5
Widowed	27	40.9
Education level ^a		
Low	31	47
Medium	16	24.2
High	9	13.6
Unknown	10	15.2
Perceived financial situation		
Bad	3	4.5
Fair	24	36.4
Good	38	57.6
Unknown	1	1.5
Perceived health status		
Bad	16	24.2
Fair	15	22.7
Good	35	53
Housing arrangement		
Community dwelling	47	71.2
Assisted living	19	28.8
Residence		
Urban	21	32
Rural	45	68

Note: ^aLow level of education refers to participants whose highest level of education is lower secondary education. Medium level of education refers to participants whose highest level of education is upper secondary education. High level of education refers to people who completed tertiary education.



Figure 1. Overview participant-generated domains of subjective well-being.

the social life domain. This indicates that social life is the most important domain of SWB for all of the participant groups, as well as for the whole group. Second, when we looked at the relative importance of the other domains in more detail, we observed that all of the groups mentioned aspects related to activities, health, and space and place far more often than aspects related to the other nine domains. However, we also observed differences in how these three domains were prioritized by each of the groups.

In their word clouds, participants aged 75 and older included aspects of health more frequently (about 1.5 times more often) than aspects relating to activities and space and place. In contrast, participants aged 65–74 years mentioned aspects of activities more often than aspects of health and space and place (about 1.5 times). When we compared men and women, we found that male and female participants had similar perceptions of which domains are important for their SWB. The community-living participants mentioned aspects of activities more frequently than aspects of health and space and place (about 1.5 times more often), whereas the assisted-living participants mentioned aspects of health more often (about 1.5 times) than aspects of activities and space and place.

The four domains of social life, activities, health, and space and place are very important to our participants. None of the groups considered here deviated from this pattern. These results are in line with the findings of [Bowling and colleagues \(2003\)](#), [Jopp and colleagues \(2014\)](#), and [Wilhelmson and colleagues \(2005\)](#), who noted in their studies on concepts similar to SWB that different subgroups (based on age or gender) typically mention the same domains, but that older and assisted-living participants tend to prioritize aspects of health because they have experience with negative health events ([Bowling et al., 2003](#); [Wilhelmson et al., 2005](#)). Similarly, we found that a larger share of older and assisted-living participants reported having a bad or fair health status.

In the remainder of this article, we zoom in to the specific aspects of the four dominant domains in order to gain a more detailed understanding of the specific aspects that are important to older adults of different ages and genders, and in different housing arrangements.

Aspects of Social Life

The participants mentioned 14 aspects related to social life: children, social contacts in general, friends, partner, (great-) grandchildren, family, neighbors, social clubs, village community, church community, circle of acquaintances, colleagues, pets, and loneliness (Supplementary Figure 1). We found that all of the groups mentioned children, social contacts in general, (great-) grandchildren, neighbors, and family. Additionally, having friends, having a partner, and social clubs were frequently mentioned by most groups.

When we examined the age groups in more detail, we found that among the participants aged 85 and older,

none said that friends or social clubs were important for their SWB and relatively few mentioned having a partner. Among the participants aged 65–74 years, having friends was rated as relatively important. The views of female and male participants were roughly similar. The main gender difference was in the importance of having a partner, which was mentioned more often by the male participants. This can be explained by the fact that a larger share of the female than the male participants were widowed. Our findings revealed that the perspectives of community-dwelling and assisted-living participants diverged. Unlike the community-dwelling participants, none of our assisted-living participants included a partner, social clubs, colleagues, pets, and other communities in their word clouds. They did, however, mention the importance of having social contacts in general and contact with neighbors more often than the community-dwelling participants. A possible explanation for these differences is that people in assisted-living tend to shift their focus to other types of social relationships to compensate for the loss of a spouse or of other important relationships ([Baltes & Baltes, 1990](#); [Rook, Mavandadi, Sorkin, & Zettel, 2007](#)).

Finally, when we looked at the number of aspects mentioned by each group, we found that assisted-living participants and the participants aged 85 and older included the lowest number of aspects of social life in their word clouds. This finding suggests that the composition of social networks changes with age. This shift may be due to age- and loss-related changes, such as the deaths of contacts; and of social selection processes, such as a deliberate choice to focus on the most meaningful relationships ([Bowling, Farquhar, & Grundy, 1995](#); [Carstensen, 1992](#)).

Aspects of Activities

Our participants mentioned a broad range of home-based, leisure, and productive activities as being important for their SWB, including activities in general, going on holiday/traveling, walking, volunteering or working, helping others, cycling, reading, exercising, enjoying culture, gardening, and going out (Supplementary Figure 2). The aspect of activities in general was mentioned by all of the groups. Most of the groups also frequently mentioned walking and cycling (except participants aged 85 and older) and going on holiday/traveling (except assisted-living participants and those aged 85 and older).

When we looked at the aspects mentioned by each age group, we noticed some age-specific particularities. First, participants aged 65–74 years frequently mentioned volunteering or working, whereas older participants did not mention volunteering or working at all. Another main difference was in the aspect of going on holiday/traveling, which was repeatedly mentioned by participants aged 65–84 years, but never by participants aged 85 and older. We also found some gender differences: more male than

female participants included volunteering or working and helping others. Moreover, female participants mentioned a wide range of activities (e.g., organizing dinners) that were not mentioned by male participants and vice versa. Our findings further revealed that community-dwelling and assisted-living participants had different views on which activities are important for SWB: community-dwelling participants often mentioned going on holiday/traveling, helping others, volunteering or working, exercising, and gardening, whereas none of the assisted-living participants mentioned any of these aspects. As was the case for the social life domain, participants aged 85 and older and assisted-living participants generated the lowest number of aspects for the activities domain.

The observed differences between groups of participants can be explained by looking at the physical intensity levels of the activities mentioned, which ranged from low-intensity (e.g., doing needlework) to high-intensity (e.g., running). Our older (aged 85 and older) and assisted-living participants included mainly low-intensity activities in their word clouds, whereas younger and community-dwelling participants mentioned more high-intensity activities. This finding is in line with previous research, which found that the number and kinds of activities older adults engage in are likely to change as they experience decline in various life domains, such as health and social relationships (Baltes, 1997; Strain, Grabusic, Searle, & Dunn, 2002). It has been argued that, when faced with decline, individuals make conscious choices to reduce or substitute their engagement in activities (Baltes, 1997; Rubinstein, Kilbride, & Nagy, 1992). For instance, someone who likes to travel might substitute that activity with less physically demanding activities in the home, such as reading (Menec, 2003).

Aspects of Health

Participants named seven aspects of health: health in general, being happy and content, mental health, taking good care of yourself, inner peace, and health of (grand)children. In Supplementary Figure 3, all of the aspects are shown for the different groups. Among all of the participant groups, the aspect of health in general was mentioned most often, which underlines the importance of general health for SWB. In addition to mentioning health in general, all of the groups highlighted the aspects of being happy and content and mental health.

When we examined these aspects in more detail across our groups of participants, we observed that there was considerable overlap between aspects of health, as well as in the relative importance of each aspect. However, we found some small differences. First, participants in the older age groups mentioned mental health relatively more often than participants aged 65–74 years. In the context of our larger study, we discovered that most of the participants who mentioned mental health had personal experiences with Alzheimer's disease. Hence, it appears that past experiences

can play a role in the prioritization of aspects (Bowling and Windsor, 2001). Male and female participants seemed to have similar views on the important aspects of health, with the only difference being that some of our female participants highlighted the health of (grand)children, whereas the male participants did not. The health aspects mentioned by our community-dwelling and assisted-living participants also largely overlapped.

Aspects of Space and Place

Our participants included many spatial aspects in their word clouds: living environment, safety, living well, home, garden, nature, being outside, amenities, post office, sports fields, supermarket, campsite, a clean and neat interior, and keeping their own things (Supplementary Figure 4). These aspects are related to the spatial levels of home, neighborhood, village/city, and beyond. Furthermore, participants mentioned both the functional characteristics of their environment (e.g., proximity of shops) and the perceived characteristics of their living environment (e.g., pleasant or safe). The aspect of home was mentioned by all of the participant groups, and most of the groups highlighted the importance of living well, the living environment, garden, and safety.

When we looked more closely at the age groups, we found that participants aged 85 and older often highlighted the importance of home in their word clouds. Unlike younger participants, they did not mention the importance of living well, living environment, garden, safety, and being outside. Additionally, participants aged 75 and older frequently wrote down amenities in general and specific amenities, such as a community center. Only community-living participants noted the importance of shops and other amenities, which can be explained by the fact that assisted-living participants no longer need these facilities. Compared with the community-dwelling participants, the assisted-living participants mentioned relatively more often aspects related to the home environment, such as having their own things around them. When we compared men and women, we found that female participants stressed safety, nature, and being outside as important aspects of SWB; whereas male participants never included these aspects in their word clouds. Finally, when we looked at the number of aspects mentioned by each group of participants, we found that the male participants and the participants aged 85 and older mentioned a smaller range of aspects of space and place than the other participant groups.

In conclusion, although the spatial level of home was mentioned by all of the participant groups, the home environment was revealed to be most important among assisted-living participants and participants aged 85 and older. This finding is in line with much of the current literature, which has shown that the geographical worlds of older adults tend to shrink as they age and experience losses (Lawton, 1985; Rubinstein et al., 1992). The home

environment is particularly salient to the well-being of older adults, as most of their activities of daily living take place in a reduced space (Gilroy, 2005; Sixsmith et al., 2014).

Discussion and Implications

In this exploratory study, we adopted a participant-generated word cloud method to obtain a lay-view understanding of SWB from 66 older adults of different gender and age and with different housing arrangements in the northeastern Netherlands. Our innovative research approach resulted in detailed, empirically grounded knowledge of the aspects, categorized under domains, of our participants' views on SWB.

We found that 15 main domains were important to our participants: social life, activities, health, space and place, independence, mobility, financial situation, societal criticism, political situation, personal characteristics, way of life, religion, health care and support, personal development, and other. The large variety of domains identified indicates that, from our participants' perspective, SWB is a multidimensional concept. The results also illustrate that SWB is contextual in nature, because the participants related their SWB not only to individual characteristics (e.g., health), but also to characteristics of their social, physical, and political environments (e.g., space and place, political situation; Cosco et al., 2013; Jopp et al., 2014).

The first four domains—social life, activities, health, and space and place—were strongly represented in the perspectives of our participants, although groups of participants of different ages and in different housing arrangements prioritized the domains of health and activities differently. At the domain level, our findings correspond with those of previous empirical research on older adults' perspectives on SWB in developed countries (Cosco et al., 2013). However, Jopp and colleagues (2014) and Wilhelmson and colleagues (2005) reported that spatial context was mentioned much less often than other domains. In the perspectives of our participants, the space and place domain was reflected much stronger. This is in line with Gabriel and Bowling (2004), Puts and colleagues (2007), Richard and colleagues (2005), and Ward and colleagues (2012).

We also examined the results at the level of aspects in order to gain a more detailed understanding of the differences between groups of participants. An important finding that emerged was that all of the domains are multidimensional. In addition, when comparing our results with previous studies, we found evidence that understandings of domains are mediated by culture (Browne et al., 1994; Fry & Ikels, 2011). For instance, our participants frequently mentioned cycling as an important activity for their SWB, which can be explained by the Dutch cycling culture and excellent cycling infrastructure. We did not come across cycling as an important aspect of SWB in other studies that examined older adults' own understandings of SWB, except in the study by Puts and colleagues (2007) in the

Netherlands. Our findings indicate that participants' concepts and priorities regarding SWB are mediated by their individual characteristics, past experiences, and contextual circumstances, which is in line with Bowling and Windsor (2001) and Browne and colleagues (1994).

An important conclusion that can be drawn from our detailed examination at both the domain and the aspect levels is that different domains have different meanings for our participants. Moreover, domains and aspects are prioritized differently by different groups of participants. Because participants' concepts and priorities regarding SWB seem to be embedded in their individual characteristics, past experiences, and contextual circumstances, we argue that SWB should be interpreted in light of that dynamic context. By contrast, Jopp and colleagues (2014) recently suggested on the basis of similar observations at the domain level that generic models and measures that include these shared domains may be applicable across cultures, ages, and genders. However, we contend that relevant aspects, categorized by domain, will be overlooked if researchers and policymakers rely on a predetermined, generic set of domains or standardized measurement scales. This argument has also been made by Bowling and Windsor (2001), Browne and colleagues (1994), and Fry and Ikels (2011). Thus, to provide meaningful empirical information for researchers and policymakers, researchers must find ways to study SWB as an individualized and contextualized process. The reflective nature of our participant-generated word cloud method represents a first step in this direction, as the resulting data are well grounded in the perceptions and realities of participants. Nevertheless, this study has a number of limitations.

First, we assumed that aspects that were mentioned more frequently were more important to participants, which may not always correspond with participants' views. Second, the generated domains consisted of varying numbers of aspects and are thus not equally "rich" with data. As a result, the analysis at the domain and the aspect levels generated different insights, which may not be representative. Specifically, because the domain of social life was most rich in aspects, it was considered most important. However, a count of the individual aspects indicates that health was by far the aspect that was mentioned most often. Based on our data, we cannot clearly determine whether the social or the health component of well-being is most important for older adults in the northeastern Netherlands. Third, the groups of participants varied in size and the generated number of aspects was not weighted by the group size. Although the relative size of the group does not influence the prioritization of domains and aspects found within a particular group, it might have influenced the overall ranking of the participant-generated domains. With equal group sizes, the four main domains would remain, but considering that health is very important to the assisted-living participants, this domain would most likely rank second instead of third in the overall overview.

A fourth limitation relates to the issue of selection bias and how this might have influenced our results. Despite our efforts to adopt various ways of recruitment, the choice to recruit some of the participants by visiting social clubs, sports clubs, and a local health event may have resulted in relatively active, healthy, and socially conscious community-dwelling participants. As a result, the word clouds of these participants may be skewed toward related aspects. However, we did not find variation in the main patterns of findings between participants who were recruited in different ways. Fifth, as we collected information on the subjective experiences of a small number of participants, the results are not generalizable to all older adults. However, as the aim of our approach was to uncover older adults' own views on the domains and aspects constitutive of SWB, the sample size was appropriate and relatively large for a qualitative study.

The pursuit of SWB has become a common rationale behind policies (e.g., health and social policies) at the international, national, local, and local-institutional scale. Our findings advance the understanding of the multidimensional and contextualized ways in which (groups of) participants conceptualized SWB and, as such, have several research and policy implications. First, better measures of SWB will strengthen the evidence base for policymaking, as indicators of SWB can be used in formulating and evaluating policy (van Hoorn, 2007). Our research confirms previous findings, arguing that models of SWB and measurement scales used should—in addition to biomedical and economic indicators—include a variety of relevant individual and contextual domains of SWB. To ensure that models and measures of SWB are empirically grounded in the understandings of a specific population, we recommend applying our participant-generated word cloud method to a large (representative) population sample. The open-ended nature of the method will allow participants to mention the aspects of SWB that are important to them. In addition, they can be asked to assess their satisfaction with each aspect mentioned and to indicate their relative importance. Next, at the local and institutional level, the information obtained about what aspects (groups of older) adults find important to their SWB could facilitate the development of policy agendas and the promotion of a more person-centered approach to well-being. This can support local policymakers and institutional boards of assisted-living facilities in the (re)allocation of resources and services and in the development of specific interventions that are aligned to their experiences (Minney & Ranzijn, 2015). This would result in a more efficient and effective use of resources and services and ultimately in improved well-being of the older adults concerned.

More in-depth exploration is needed, however, to help us understand more fully the variety of meanings of aspects and domains across different populations and contexts. Specifically, future studies could focus on studying conceptions of SWB for older adults with a variety of individual and environmental characteristics not considered in this study,

such as educational level, ethnicity, (perceived) health status, and rural or urban living environments. In addition, given the many different types of assisted-living arrangements available and their variety in services offered, future research is needed to explore in more detail the conceptions of SWB for older adults in the different assisted-living facilities.

Supplementary Material

Please visit the article online at <http://gerontologist.oxfordjournals.org/> to view supplementary material.

Funding

This work was supported by the multidisciplinary research programme Healthy Ageing, Population & Society (HAPS). HAPS is supported by the University of Groningen.

Acknowledgment

We are grateful to the participants for sharing their views with us and to our colleagues for their constructive suggestions and comments. Special thanks to Tamara Kaspers for helping us with designing the figures.

References

- Baltes, P. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist*, *52*, 366–380. doi:10.1007/978-1-4615-0357-6_2
- Baltes, P., & Baltes, M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. Baltes & M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1–34). New York: Cambridge University Press.
- Bergland, A., & Kirkevold, M. (2006). Thriving in nursing homes in Norway: Contributing aspects described by residents. *International Journal of Nursing Studies*, *43*, 681–691. doi:10.1016/j.ijnurstu.2005.09.006
- Borglin, G., Edberg, A., & Hallberg, I. (2005). The experience of quality of life among older people. *Journal of Aging Studies*, *19*, 201–220. doi:10.1016/j.jaging.2004.04.001
- Bowling, A. (2007). Aspirations for older age in the 21st century: What is successful aging? *The International Journal of Aging and Human Development*, *64*, 263–297. doi:10.2190/10k1-87w4-9r01-7127
- Bowling, A., Gabriel, Z., Dykes, J., Dowding, L., Evans, O., & Fleissing, A. (2003). Let's ask them: A national survey of definitions of quality of life and its enhancement among people aged 65 and over. *The International Journal of Aging and Human Development*, *56*, 269–306. doi:10.2190/bf8g-5j8l-ytrf-6404
- Bowling, A., Farquhar, M., & Grundy, E. (1995). Changes in network composition among older people living in inner London and Essex. *Health & Place*, *1*, 149–166. doi:10.1016/1353-8292(95)00021-d
- Bowling, A., & Gabriel, Z. (2007). Lay theories of quality of life in older age. *Ageing & Society*, *27*, 827–848. doi:10.1017/s0144686x07006423

- Bowling, A., & Windsor, J. (2001). Towards the good life: A population survey of dimensions of quality of life. *Journal of Happiness Studies*, 2, 55–81.
- Browne, J., O'Boyle, C., McGee, H., Joyce, C., McDonald, N., O'Malley, K., & Hiltbrunner, B. (1994). Individual quality of life in the healthy elderly. *Quality of Life Research*, 3, 235–244. doi:10.1007/bf00434897
- Campbell, A., Converse, P., & Rodgers, W. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russell Sage Foundation.
- Carstensen, L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging*, 7, 331–338. doi:10.1037/0882-7974.7.3.331
- Cosco, T., Prina, A., Perales, J., Stephan, B., & Brayne, C. (2013). Lay perspectives of successful ageing: A systematic review and meta-ethnography. *BMJ Open*, 3, e002710. doi:10.1136/bmjopen-2013-002710
- Diener, E., Lucas, R., Schimmack, U., & Helliwell, J. (2009). *Well-being for public policy*. Oxford: Oxford University Press.
- Diener, E., Scollon, C., & Lucas, R. (2009). The evolving concept of subjective wellbeing, the multifaceted nature of happiness. In E. Diener (Ed.), *Assessing well-being: The collected works of Ed Diener* (pp. 67–100). Dordrecht, the Netherlands: Springer.
- Diener, E., & Suh, E. (2000). *Culture and subjective well-being*. Cambridge, MA: Massachusetts Institute of Technology.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62, 107–115. doi:10.1111/j.1365-2648.2007.04569.x
- Farquhar, M. (1995). Elderly people's definitions of quality of life. *Social Science & Medicine*, 41, 1439–1446. doi:10.1016/0277-9536(95)00117-p
- Forgeard, M., Jayawickreme, E., Kern, M., & Seligman, M. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1, 79–106. doi:10.5502/ijw.v1i1.15
- Fry, C., & Ikels, C. (2011). Culture and meaning: Strategies for understanding the well-being of the oldest old. In L. Poon & J. Cohen-Mansfield (Eds.), *Understanding well-being in the oldest-old* (pp. 261–280). Cambridge: Cambridge University Press.
- Gabriel, Z., & Bowling, A. (2004). Quality of life from the perspectives of older people. *Ageing and Society*, 24, 675–691. doi:10.1017/S0144686X03001582
- Gilroy, R. (2005). The role of housing space in determining freedom and flourishing in older people. *Social Indicators Research*, 74, 141–158. doi:10.1007/s11205-005-6520-5
- Guillemin, M., & Drew, S. (2010). Questions of process in participant-generated visual methodologies. *Visual Studies*, 25, 175–188. doi:10.1080/1472586x.2010.502676
- Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative research methods*. London: Sage.
- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. doi:10.1177/1049732305276687
- Hvalvik, S., & Reiersen, I. (2011). Transition from self-supported to supported living: Older people's experiences. *International Journal of Qualitative Studies on Health and Wellbeing*, 6, 7914. doi:10.3402/qhw.v6i4.7914
- Jopp, D., Wozniak, D., Damarin, A., De Feo, M., Jung, S., & Jeswani, S. (2014). How could lay perspectives on successful aging complement scientific theory? Findings from a U.S. and a German life-span sample. *The Gerontologist*, 55, 91–106. doi:10.1093/geront/gnu059
- Kahn, D. (1999). Making the best of it: Adapting to the ambivalence of a nursing home environment. *Qualitative Health Research*, 9, 199–232. doi:10.1177/104973299129121631
- Kindon, S., Pain, R., & Kesby, M. (2007). *Participatory action research approaches and methods*. London: Routledge.
- Lawton, M. (1985). The elderly in context: perspectives from environmental psychology and gerontology. *Environment and Behavior*, 17, 501–519. doi:10.1177/0013916585174005
- Liebenberg, L. (2009). The visual image as discussion point: Increasing validity in boundary crossing research. *Qualitative Research*, 9, 441–467. doi:10.1177/1468794109337877
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Martin, P., Kelly, N., Kahana, B., Kahana, E., Willcox, B., Willcox, D., & Poon, L. (2015). Defining successful aging: A tangible or elusive concept? *The Gerontologist*, 55, 14–25. doi:10.1093/geront/gnu044
- Menec, V. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology*, 58, 74–82. doi:10.1093/geronb/58.2.s74
- Minney, M., & Ranzijn, R. (2015). “We had a beautiful home... but I think I'm happier here”: A good or better life in residential aged care. *The Gerontologist*. Advance online publication. doi:10.1093/geront/gnu169
- Puts, M., Shekary, N., Widdershoven, G., Heldens, J., Lips, P., & Deeg, J. (2007). What does quality of life mean to older frail and non-frail community-dwelling adults in the Netherlands? *Quality of Life Research*, 16, 263–277. doi:10.1007/s11136-006-9121-0
- Richard, L., Laforest, S., Dufresne, F., & Sapinski, J. (2005). The quality of life of older adults living in an urban environment: Professional and lay perspectives. *Canadian Journal on Aging*, 24, 19–30. doi:10.1353/cja.2005.0011
- Rook, L., Mavandadi, S., Sorkin, D., & Zettel, L. (2007). Optimizing social relationships as a resource for health and well-being. In C. Aldwin, C. Park, & A. Spiro III (Eds.), *Handbook of health psychology and aging* (pp. 267–285). New York: The Guilford Press.
- Rubinstein, R., Kilbride, J., & Nagy, S. (1992). *Elders living alone: Frailty and the perception of choice*. New York: Walter de Gruyter.
- Ryan, R., & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. doi:10.1146/annurev.psych.52.1.141
- Ryan, S., & Ziebland, S. (2015). On interviewing people with pets: Reflections from qualitative research on people with long-term conditions. *Sociology of Health and Illness*, 37, 67–80. doi:10.1111/1467-9566.12176
- Sastre, M. (1999). Lay conceptions of well-being and rules used in well-being judgments among young, middle-aged, and elderly adults. *Social Indicators Research*, 47, 203–231.
- Schrauf, R., & Sanchez, J. (2008). Using freelist to identify, assess, and characterize age differences in shared cultural domains. *Journal of Gerontology*, 63, 385–393. doi:10.1093/geronb/63.6.s385
- Sixsmith, J., Sixsmith, A., Fänge, A., Naumann, D., Kuxsera, C., Tomsone, S., ... Woolrych, R. (2014). Healthy ageing and home: The perspectives of very old people in five European

- countries. *Social Science & Medicine*, 106, 1–9. doi:10.1016/j.socscimed.2014.01.006
- Stiglitz, J., Sen, A., & Fitoussi, J. (2009). *Report by the commission on the measurement of economic performance and social progress*. Paris: Commission on the Measurement of Economic Performance and Social Progress.
- Strain, L., Grabusic, C., Searle, M., & Dunn, N. (2002). Continuing and ceasing leisure activities in later life: A longitudinal study. *The Gerontologist*, 42, 217–223. doi:10.1093/geront/42.2.217
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory*. London: Sage.
- van der Riet, M. (2008). Participatory research and the philosophy of social science: Beyond the moral imperative. *Qualitative Inquiry*, 14, 546–565. doi:10.1177/1077800408314350
- van Hoorn, A. (2007). A short introduction to subjective well-being: its measurement, correlates and policy uses. In OECD (Ed.), *Statistics, Knowledge and Policy 2007: Measuring and fostering the progress of societies* (pp. 215–229). Paris: OECD Publishing.
- Vanhoutte, B. (2014). The multidimensional structure of subjective well-being in later life. *Population Ageing*, 7, 1–20. doi:10.1007/s12062-014-9092-9
- Ward, L., Barnes, M., & Gahagan, B. (2012). *Well-being in old age: findings from participatory research*. Brighton, UK: University of Brighton.
- Westerhof, G., Dittmann-Kohli, F., & Thissen, T. (2001). Beyond life satisfaction: Lay conceptions of well-being among middle-aged and elderly adults. *Social Indicators Research*, 56, 179–203.
- Wilhelmson, K., Andersson, C., Waern, M., & Allebeck, P. (2005). Elderly people's perspectives on quality of life. *Ageing and Society*, 25, 585–600. doi:10.1017/s0144686x05003454