Advancements in the Understanding of What Wellbeing at Very Old Age Is: An Exploratory Study

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Abstract:

With increasing number of old older adults worldwide, understanding and promoting wellbeing become a priority. The state of wellbeing is a multifaceted phenomenon that refers to an individual's subjective perception and, therefore, exploring perspectives of old older adults for ageing well is developing to be a relevant area of research, along the general topic of aging well regardless of age. The purpose of this article was to explore perspectives of wellbeing among old older adults from Romania and Portugal. A comparative perspective to a sample of older adults in the context of testing Wellbeing of Older People Survey was employed. Three major themes were identified: a) with age, the relevance of physical and mental health fade for the old older adults' perspective, hence the importance of preserving their wellbeing, b) belonging transform from independence and feeling useful into social contacts and c) the most important things with age is making ends meet and the satisfaction towards the living situation. This study contributes to get a better insight concerning old older adults' perspectives on wellbeing and aging well. Enhancing support in care and designing age friendly cities which support participation in social activities, living situation are all contributing factors to aging well. Vital factors are to be considered in developing strategic health and rehabilitative plans for promoting aging well among older adults.

1 INTRODUCTION

Subtle but massive societal changes, such as demography and aging, call for social awareness and vision towards our elderly. Health and care sectors, as well as businesses and politics, needs to embed sustainability and resilience in facing an aging population. But that is not possible without truly understanding what well-being at very old age is.

The understanding of old elderly's well-being bears relevance because it reverberates on the topic of the already existing and gauging crisis in health and care sector and, more, on the increasing impact of health and social care services for older people which are intended at improving well-being rather than health alone (Himmler et al, 2022).

More, Covid-19 impact merely showed the societal crisis in a nutshell. And it revealed how vulnerable elderly are and how fragile the care ecosystem is. After 2020, the overreaching themes of

well-being, quality of life and independence, flourished. There are more studied in the last 3 years that in 20 years before the pandemic.

The aim of this study is to shed light on the effects of a concept mapping strategy regarding wellbeing for the population aged 80 and over. For this reason, we look at what wellbeing is from the perspective of elderly themselves.

All these approaches have their stake because research showed that prevention can support aging at home and reduce costs on health and care. According to a systematic review and meta-analysis of 89 trials, complex interventions can help elderly people to live safely and independently, and could be tailored to meet individuals' needs and preferences (Beswick et al, 2008). Complex interventions are combinations of interdisciplinary teamwork for health and social problems. The review found that interventions reduced the risk of not living at home, nursing-home admissions, hospital admissions, and falls, and

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improved physical function in elderly people. However, more understanding is needed to identify the optimal components of complex interventions for elderly people.

Hence, we have started asking ourselves: What precisely oldest old wellbeing is? What are the effects of the oldest old lack of wellbeing? What we are aiming at through our social vision? To what extent would age-friendly cities improve the wellbeing of the oldest old?

However, the measure is foremost a subjective one and older adults represent a heterogeneous group, which could explain the contradictory results found in the literature. After concept mapping, we employ a gerontographics perspective to categorize the older adults in their views on wellbeing (Moschis, 2019).

Generally, to the older adults, wellbeing stays as a multidisciplinary concept, which comprises overlapping terms such as: independence, quality of life, mental health, dignity, self-determination, or mobility (Ravulaparthy et al, 2016; Pantelaki et al, 2021; Bechtold et al, 2021; Marques et al, 2020).

1.1 Well-Being and Independence

When analysing well-being as the importance of promoting and maintaining the independence, also concepts such as utility and social connectedness of elderly people for their well-being and quality of life are strongly related (Siobhan, 2012; Hadeel et al, 2018).

Independence for elderly means having the ability to live autonomously and with dignity, while maintaining physical and mental well-being. Independence can have different meanings for different older people, depending on their abilities and preferences, but some common aspects are: having the freedom to make choices and decisions about one's own life, such as daily routines, activities, and personalization of one's space.

The feeling of utility for elderly is the sense of being useful and productive, and having a purpose and meaning in life. It is related to the concept of generativity, which is the desire to contribute to the well-being of others and the society. The feeling of utility can have positive effects on the mental and physical health of older people, such as increasing their self-esteem, happiness, and life satisfaction, and reducing their depression, anxiety, and cognitive decline. The feeling of utility can help older people cope with the challenges and losses of aging, and maintain a sense of identity and dignity.

1.2 Well-Being and Health

Other authors, discuss well-being from the mental health perspective, hence, the influence of psychological factors, such as positive emotions, self-esteem, life satisfaction, and purpose in life, on the health and well-being of elderly people is presented (Bar-Tur, 2021, Hadeel et al, 2018, Siobhan et al, 2012).

The frameworks so far refer to a variety of variables, such as biological, psychological, and social factors that affect the health and well-being of older adults, such as chronic diseases, cognitive function, social engagement, and life satisfaction. Other works look at the psychological interventions that aim to enhance well-being in healthy older adults. It categorizes the interventions into four types: cognitive-behavioral, mindfulness-based, positive psychology, and existential. It evaluates the effectiveness, mechanisms, and limitations of each type of intervention, and provides recommendations for future research and practice (McClintock et al, 2016; Iwano et al, 2022).

1.3 Well-Being and Lifestyle Factors

Besides independence and mental health, well-being has been also considered from the role of lifestyle factors, such as physical activity, healthy eating, and cognitive stimulation, in preventing or reducing the risks of physical and mental decline in elderly people. literature review on the relationship between memory, cognitive development, and aging linked with longevity. The review determined that there are psycho-cultural aspects that have a decisive influence on the increase in longevity, such as the performance of activities with positive mental states, positive emotions and experiences, and the level of studies (Maldonado et al, 2020).

1.4 Well-Being and the Care Ecosystem

Family relationships affect the well-being of parents, adult children, and grandparents. Factors that influence the quality and quantity of family interactions, such as life course transitions, geographic distance, and cultural norms are inquired along the benefits and challenges of family relationships for well-being, such as social support, intergenerational solidarity, and conflict (Thomas and Umberson, 2017).

1.5 Wellbeing and Society

Elderly well-being is also seen from a social perspective, where the need for appropriate and

accessible services, opportunities, and support for elderly people to cope with the challenges and losses of aging and to enhance their vital involvement and active engagement in life.

This perspective also informed a more practical approach where positive aging concepts and strategies to enhance well-being in the elderly are translated into practical approaches for Positive Aging. Drawing upon positive psychology and positive aging research and tools, programs are designed to help older adults improve their well-being by acquiring skills and strategies to cope with present and future challenges (Bar-Tur, 2021).

Making ends meet and living situation are both economic and social dimensions of elderly wellbeing. Economic dimensions refer to the material resources and income that affect the quality of life and opportunities for older people. Social dimensions refer to the interpersonal relationships and social networks that provide support and belonging for older adults (Reuben and Lim-Soh, 2021). Making ends meet and living situation are related to both economic and social dimensions, as they influence and are influenced by the financial security and social integration of older people. For example, making ends meet can affect the ability to afford adequate housing, health care, and leisure activities, as well as the level of stress and satisfaction with life. Living situation can affect the availability and quality of social contacts, the sense of autonomy and privacy, and the risk of isolation and loneliness. Therefore, both making ends meet and living situation are important aspects of elderly well-being that involve both economic and social factors.

1.6 Wellbeing Mapped in Age-Friendly Cities

But making ends meet and living situation are related to age-friendly cities. Age-friendly cities are cities that promote healthy and active ageing and improve the quality of life for people over 60. One of the aspects of age-friendly cities is to provide affordable and accessible housing options for older people, as well as adequate public services and infrastructure to support their daily needs. Making ends meet and living situation are both influenced by the availability and affordability of housing, as well as the social and economic opportunities that the city offers.

Besides care support, age-friendly cities have been another point of focus recently for promoting wellbeing. They aim to create age-friendly cities that promote active aging, social inclusion, and wellbeing (Gibney et al, 2020; Nieboer et al, 2018; Steels, 2015). Hence, in-depth understanding of what wellbeing is has implications for designing care support and age-friendly cities.

Therefore, age-friendly cities can help older people to have a better living situation and make ends meet, as well as to enjoy a more fulfilling and dignified life: a) Having the resources and support to cope with the challenges and changes of aging, such as mobility, health, finances, and social connections. Having the opportunity to pursue one's interests, hobbies, and goals, and to contribute to one's family, friends, and community. b) Having the self-esteem and confidence to feel valued and respected as an individual. c) Independence for elderly is important because it can enhance their quality of life, happiness, and resilience. It can also prevent or reduce the risks of depression, isolation, hopelessness, and stress. Independence can be promoted and maintained by providing older people with appropriate and accessible services, such as home wellness solutions, home-delivered meals, assistive devices, and transportation. It can also be supported by encouraging older people to stay active, engaged, and connected with others, and by respecting their wishes and preferences (NET4Age, 2022, 2024).

Lack of independence, utility, and social connections can have negative effects on the health and well-being of elderly people. Some of the possible effects are: a) Increased risk of physical and mental conditions, such as high blood pressure, heart disease, obesity, weakened immune system, anxiety, depression, cognitive decline, and Alzheimer's disease; b) Reduced quality of life, happiness, and life satisfaction. c) Lowered self-esteem, confidence, and sense of identity. d) Increased feelings of isolation, loneliness, hopelessness, and stress. e) Decreased ability to cope with the challenges and losses of aging.

To prevent or reduce these effects, it is important to promote and maintain the independence, utility, and social connectedness of elderly people. This can be done by providing them with appropriate and accessible services, opportunities, and support, and by respecting their choices and preferences.

2 METHODOLOGY

We have started from a newly developed Well-being of Older People measure (WOOP) which has been elaborated based on older people's own views on what is important to their well-being (Hackert et al, 2020; Bowling et al., 2013; Bowling and Stenner, 2011), instead of expert opinion regarding relevant well-being domains.

We will compare data discussed in the study performed by Hackert et al (2020) with data obtained from the field trials in Portugal and Romania at the beginning of the field trial: Hackert et al (2020) WOOP vs A4A WOOP, within the framework of the project "From Smart Home to Care Home – AAL4All (A4A)", co-funded by the European Programme AAL (Active Assisted Living – ICT).

When discussing the limitations of the study/sample, Hackert et al (2020) emphasize that greater insight is needed in the performance of the WOOP in older people with more severe physical and mental health problems, which were underrepresented in their sample. We aim to overcome this by employing a larger range of older adults with various mental and health conditions, and levels of fragility.

The study undertaken by Hackert et al (2020) is the first quantitative validation of the *Well-being of Older People* measure (WOOP). It is an online survey, where data was collected between December 2017 and January 2018. A sampling agency recruited 1113 respondents aged 65 years and older in the Netherlands, approximately representative of this population in terms of age, sex and level of education.

2.1 WOOP Description

WOOP comprises 9 items which cover the central aspects of well-being that respondents mentioned when describing what well-being meant to them.

On each item, respondents can indicate the severity of their health problems using five response levels. The minimum score is 9 (1 –worst imaginable, 1 for each item cumulates 9), while the maximum score is 45 (5 – best imaginable, 5 for each item cumulates 45 points).

Table 1: The items of the Wellbeing for the Old People Measure according to Hackert et al (2021).

WOOP's Items		
1.	Physical health	
2.	Mental health	
3.	Social contacts	
4.	Receive support	
5.	Acceptance and resilience	
6.	Feeling useful	
7.	Independence	
8.	Making ends meet	
9.	Living situation	

2.2 A4A WOOP Population

As Hackert et al (2020) mentioned when discussing the limitations of their study, the older population investigated has some particularities which would rather ascribe the data to an older population who is generally physically and mentally well. The population targeted for the testing A4A Solution is rather more fragile, living alone and benefitting from care, and can be seen rather physically or psychologically unwell.

In the case of Hackert et al (2020) sample, older people in the highest age groups, and those with low levels of well-being and (physical and mental) health was underrepresented.

Dependent older adults on health and social care (e.g., living in a nursing home), might be missing from the sample. people in poor well-being states, scoring low on the WOOP items, remains low.

- older persons with a non-western background,
- Older people with low computer

literacy have not been reached

In the case of A4A WOOP study, a face-to-face survey was employed and data was collected in the first stage of the field trials between June 2023 and August 2023. Both in Romania and Portugal, a total number of 33 respondents aged 60 years and older was recruited. Respondents completed a questionnaire asking about their well-being, health and several background characteristics. Information was gathered on respondents' age, sex, number of children and grandchildren.

Participation was voluntary, based on informed consent and could be terminated at any point.

A4A WOOP results may differ from those presented by Hacker et al. (2021) because of the background specific characteristics of the older adults interviewed.

2.3 Descriptive Characteristics of the A4A WOOP

Descriptive characteristics of the General WOOP (Hackert et al, 2020). Both sexes were equally represented, and 65% of the respondents were married or living together. Respectively, 40%, 33% and 27% had attained a low, middle, and high education. Almost all were retired (89%), and 28% indicated material deprivation in at least one of the indicated expense categories. 61% reported two or more health problems on the Comorbidity Index, 10% received informal care, and 29% received at least one type of formal care.

Comparative to the General WOOP sample, in the case of A4A, respondents on average were 76 years old, with 40% being 80 years or older. The age range was also wider, because people with various care needs were included (such as those coming back from the hospital and being under recovery, serious health issues). Thus people 60 + were included. The wellbeing also differs because respondents are living alone. All of them reported health issues.

In the case of A4A WOOP, about 40% were over 80 years old, while in the Hackert study only 19%. More, some were post hospitalized and had severe physical limitations in A4A Survey.

We have aimed at including in our sample a wide range of vulnerabilities, be them structural or personal. Therefore, people from Southern Europe have been included and people with less education and technological familiarity.

In conclusion, if Hackert study rather comprised People Physically and Mentally Well, A4A WOPP included either physically or mentally unwell.

Differences in descriptive characteristics of the population of the Hackert et al WOOP (2020) and A4A WOOP.

Table 2: Participants description in WOOP tested by Hackert et al (2021) and A4A Project, 2022-2024.

	WOOP (Hacker et al, 2021)	WOOP A4AProject, 2022- 2024	
Inclusion	65+	60+	
Age average	74	78	
Sex	Even	More women (67%)	
Education	High	50% elementary	
Digital Literacy	High	43% no smartphone	
Western origin	Yes	40%South European	
Marital status	Most married	All living alone	
+ formal care	Low	65%	
+ informal care	Low	90%	

3 RESULTS

Due to the inclusion criteria, we may notice that on a scale from 7 to 45, the variance for the A4A WOPP is very wide. Mental health dropped to half, due to the same wide of population characteristics.

Interestingly enough, small differences can be noted in the perception of *making ends meet* and *living situation*. That leads us to the belief that individual characteristics in setting the expectations is much more important than the socio-economic realities out there.

However, socio-economic realities still have their toll as they appear as determinants to the mental and physical health where the differences are 50% larger for the first group in scoring well.

Table 3: Scoring in the population of the old adults (Hackert et al, 2020) and very old adults (A4A, 2022-2024).

Well-being measures			
	WOOP	WOOP A4A	
	(Hacker et al,	Solution –	
	2021)		
General WOOP	High	Average 34,	
scores		mode 36	
Mental health	90% great	41% great	
Physical health	65%great&good	30%great&good	
Making ends meet	60% great&good	64%great&good	
Living situations	88% great&good	75% great&good	

The following ranges were used to classify correlation strength: less than 0.10, trivial; 0.10–0.29, small; 0.30–0.49, moderate; 0.50–0.69, high; 0.70–0.89, very high; and 0.90 or higher, (nearly) perfect (Hopkins, 2002).

In the study performed by Hackert et al (2021), the WOOP general score is mildly to highly correlated to physical health, and (very) highly with (mental) health and well-being measures.

In A4A study, the WOOP has a (very) weak correlation with physical health, while it mildly correlates to mental health and (very) highly with other well-being measures. To assess the association between the WOOP items, Spearman correlations were calculated.

Table 4: Spearman correlation within A4A WOPP Measure.

Item	WOOI	P A4A Project
Physical health	.17	Weak
Mental health	.38	Moderate
Social contacts	.73	Very high
Receive support	.64	High
Acceptance and	.50	Moderate/High
resilience		
Feeling useful	.52	Moderate/High
Independence	.62	High
Making ends meet	.76	Very high
Living situation	.75	Very high

Hence, we confirm the initial statement that once age advances, the focus is on improving/ preserving well-being rather than health (alone).

4 DISCUSSION

The first cluster represents *Self-care agency*. The variables' correlation to general wellbeing is weak, due to advanced age, high fragility, and limited capabilities. Hence, what we thought to be key aspects of well-being became less relevant.

Table 5: Well-being at an advanced age and implications in designing care and age-friendly cities.

Domain	Item	Well-being Impact at	Impact
		advanced age	
Socio- economic	Making ends meet	Very high	Care support
needs	Living	Very high	Age-friendly
	situation		cities
Belonging	Social contacts	Very high	Age-friendly
			cities
	Receive	High	Age-friendly
	support		cities
	Independence	High	Care support
	Feeling useful	Moderate/ High	Care support
Self-care	Acceptance	Moderate/	-
	and resilience	High	
	Mental health	Moderate	-
	Physical health	Weak	-

The second cluster is dedicated to 'Belonging'. The items here are strongly correlated to 'Independence' and with the 'feeling of being useful' and social dimensions, such as social contacts and receiving support. It is a bit counter-intuitive to relate independence to the need for feeling useful, though they are strong dimensions of social inclusion.

The correlation between the feeling of being independent and that of being useful are present and indicate that these needs stay fundamental to one general well-being regardless of age.

Regarding potential overlap between the WOOP items, the results from the regression analyses may suggest that the content of 'social contacts' is also captured indirectly through other WOOP items. In particular, 'social contacts' and 'receive support' were highly correlated. This warrants further investigation.

We may hypothesise that with age and (either) physical and psychological deterioration, the overlap between WOOP items increases suggesting the following: Generally, the feeling of being independent is highly correlated to the feeling of being useful and to social contacts, but when age and disease advance, social contacts remain solely the expression of 'belonging'.

5 CONCLUSION

This study gives in-depth understanding of what wellbeing means for the old older adults.

Findings contribute to get better insight about older adults' perspectives on aging well. At the very old age, wellbeing is positively influenced by making ends meet, living situation and social contacts, while for young or middle aged-older adults, staying independent and the feeling of being useful, in addition to being socially engaged and enjoying good physical and mental health, all contribute to the wellbeing. Enhancing a physically The vital factors are to be considered in developing strategic care support and age friendly environments for promoting aging well among older adults.

Moreover, we argue that emotional health and human dignity are adversely affected by increasing reliance on technology. Therefore, while we agree that the benefits provided by new technologies in the process of caring are doubtless, we also argue that they may affect emotional health in ways not entirely understood.

We have mapped the relevance of the related concepts to wellbeing for the old older adults in relation to the usage of the same concepts for the old adults.

Table 6: Well-being related concepts.

1	Related concepts to well- being for older adults	The relevance of related concepts to well-being for old older adults
	Independence	Decreasing Decreasing
1	Health	Decreasing
_	Lifestyle factors	Decreasing
	Care ecosystem	Increasing
	Society	Increasing
	Age-friendly cities	Increasing

Hence, we note that as we age the ecosystems became more and more important and drive our sense of wellbeing.

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