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SUCCESSFUL AGING: A CROSS-NATIONAL STUDY OF SUBJECTIVE WELL-BEING LATER IN LIFE

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This paper aims to identify and analyze the life course and contextual factors that influence the subjective well-being (SWB) of individuals over 60 years of age. Our research is based on the results of the 5th wave of the World Value Survey. We have investigated the level of SWB for older people at both the individual and country level. The results of our research demonstrate that the strongest predictors of SWB later in life are satisfaction with one's financial state, health, and a sense of control, meaning the belief that individuals are in control of their lives. Besides this, the important factors of SWB for older people are the ability to establish and maintain friendly relations with other people, such as family members and friends, and to invest their own resources in positive emotions and important relationships for themselves. Older people from ex-communist countries have the lowest level of SWB. Older people from English-speaking countries, such as the United States, Canada, New Zealand, and the United Kingdom, have, by contrast, the highest level of SWB. These results suggest that the degree of modernization influences SWB levels very strongly. For older people, the country in which they live, the level of democracy, GDP per capita, freedom, and tolerance are very important. In contemporary society, the later period of life is a time for self-realization, new activities, new leisure, and new emotions. If society understands the needs of older people and provides opportunities for their realization, society can overcome the challenges caused by population aging. Only then can we discuss the concept of 'successful aging'.

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Introduction

The broad context of this paper focuses on the dynamic between social changes and the well-being of people in the later period of life. During the last century, population structures and vital statistics changed markedly, especially in developed countries. Alongside the increased health and longevity of the older generation, there has been an increase in early retirement (Gruber and Wise, 1999). Furthermore, the increase in the availability of occupational and private pension provision to supplement the basic state pension means that a section of those retiring have an income that is (often considerably) more than the local subsistence level. Some authors describe these phenomena as indicators of a move towards 'disorganized capitalism' (Lash and Urry, 1997), while other authors describe it as late modernity (Giddens, 1991). Whatever the conceptual status of such changes, they pose serious challenges to the understanding of life course.

In this paper we view subjective well-being (SWB) as important evidence of the extent to which societies meet the needs of their members. In other words, research on SWB among older adults can provide an important strategy for understanding the effects of macro-level structures and processes on the quality of late life.

The history of gerontology is, in many ways, a chronicle of scientific efforts to understand well-being in late life. As historians of gerontology note (e.g., Achenbaum, 1995), concern over the well-being of older adults was the driving force of early gerontological research. Indeed, the purpose of the first major multidisciplinary studies on aging – the Kansas City Studies (Cumming & Henry, 1961; Neugarten, 1968) and the Duke Longitudinal Studies of Normal Aging (Palmore, 1970) – was to identify both the quality of life in old age and the conditions that underpin well-being.

Although quality of life no longer dominates gerontological research, well-being remains a vital part of the research on aging in the social and behavioral sciences. This stems in part from a desire to monitor the effects of social change, cohort characteristics and composition, and of public policies on the well-being of the older population. As both the ability to measure and our understanding of well-being have matured, investigations into quality of life have become part of research that is beyond gerontology, but still relevant to it.

Over the past few decades the term 'successful aging' has appeared in the gerontological literature with increasing frequency. For example, are 'successful aging' and 'quality of life'

synonymous? As used in most research, successful aging aligns more closely to the multidimensional approach than to a subjective one. Indeed, it is not clear if perceptions on well-being play any part in the definitions of successful aging.

Consider the definition given by Rowe and Kahn (1998), who contend that three criteria define successful aging: low levels of disease and disability, high physical and cognitive functioning, and active engagement in life. At first glance, these characteristics seem to be the indicators of aging well. We find this definition problematic, however, in at least two ways. First, any notion that subjective perceptions of well-being are a part of successful aging is conspicuously absent. Is an older adult successfully aging if he is disability-free, physically and cognitively intact, and generally active, but rates the quality of his life as being poor? Second, this definition suggests that older adults with disability, who experience declines in physical and cognitive function, or who cannot or do not remain active, are aging unsuccessfully. This conclusion is clearly at odds with the large numbers of older adults who report high levels of well-being despite physical, cognitive, and social deficits. As Minkler and Fadem (2002) point out, taking Rowe and Kahn's definition of successful aging seriously stigmatizes and marginalizes a significant proportion of the older population.

We consider successful aging as a synonym of quality of life, life satisfaction, and subjective well-being late in life. Our main aim is to find the identifying predictors of SWB for the later life period at the individual level, the aggregate (country) level, and in multilevel models. For this purpose, we used the 5th wave of the World Values Survey, which was conducted in 2005-2007 and which includes the results from 57 countries.

Theoretical Orientations

SWB is often viewed as a theoretical research topic. Although most studies of SWB do not include theoretical justifications or interpretations of their findings, five theoretical orientations have been used in researching SWB (George LK, 2010).

Discrepancy theory

According to discrepancy theory, SWB will be highest when the discrepancy between our aspirations and our achievements is small. In contrast, SWB will be lower if our achievements fall significantly below our aspirations. Substantial evidence has supported the discrepancy theory for more than three decades. Important for our purposes is that older adults on an average

report smaller discrepancies between what they desire and what they have than do middle-aged and younger adults (Campbell et al., 1976).

Most of the previous studies examined global assessments of aspirations and achievements. Cheng (2004) measured aspiration-achievement discrepancies in three specific areas: material resources, social relationships, and health in groups of older, middle-aged, and younger adults. Older adults had significantly smaller discrepancies in material resources and social relationships than younger age-groups, but evinced larger health discrepancies. Nonetheless, the older adults reported higher levels of SWB than the two younger age-groups. Plagnol and Easterlin (2008) examined aspirations about family life and about material resources, the relationships between fulfilled aspirations and happiness, and age differences in both. In early to mid-adulthood, women were more likely than men to report higher levels of happiness and that their aspirations had been met. Later in life, however, men were happier than women and more likely to report that their aspirations had been met.

Social-comparison theory

The other popular theoretical orientation is social comparisons theory. Social comparison research demonstrates that individuals or groups to whom we compare ourselves are a critical element in assessments of our own well-being. In essence, we choose the 'yardstick' by which we evaluate our own characteristics and accomplishments and we can use upward or downward social comparisons in self-evaluations. We use 'upward social comparisons' when we compare ourselves with individuals or groups that are more advantaged than we are and the resulting self-evaluations are likely to be negative. Conversely, when we use 'downward social comparisons', we compare ourselves with those more disadvantaged than we are, resulting in positive self-evaluations. Substantial evidence indicates that older adults are more likely than young and middle-aged adults to use downward social comparisons. Gana, Alaphilippe, and Bailly (2004) found that the use of downward social comparisons explained almost all of the higher SWB reported by older adults. Similarly, Beaumont and Kenealy (2004) report that downward social comparisons mediated the effects of multiple objective life conditions – such as income and marital status – on SWB.

Strategic investments of resource theories

Several related theories focus on the link between the strategies of older adults for investing their declining social and physical resources and their SWB. Based on longitudinal data in the Berlin

Aging Study, Paul and Margaret Baltes and colleagues observed that a process they termed 'selective optimization with compensation' allowed older adults to sustain high levels of SWB, despite the onset of disease, disability, and social losses (Baltes and Carstensen, 2003). Selective optimization with compensation involves discarding less important investments and optimizing high-priority investments. If a high-priority investment is no longer possible, new – but generally similar – investments are made to compensate for the loss. Carstensen's (1992) socioemotional selectivity theory is similar to selective optimization with compensation, but focuses on social relationships. According to this theory, as resources and energy decline late in life, older adults avoid less intimate or rewarding relationships and increase their emotional investments in relationships that are more intimate or rewarding. Both selective optimization with compensation and socioemotional selectivity theory have substantial empirical support.

Social stratification of SWB theory

Stratification theory refers to the social structures and social processes that result in the differential allocation of resources and assets to members of that society. From this perspective, SWB is expected to be highest among those individuals who are allocated the most resources. There is a strong assumption that the primary predictors of SWB will be objective life circumstances and that those with the most advantaged circumstances will also have the highest levels of SWB. Three primary bases of social stratification are viewed as dominant in the United States, as well as in most other societies): socioeconomic status, race or ethnicity, and gender. Thus, stratification scholars hypothesize that people who have the highest levels of education and income, and also white adults and men, should have higher levels of SWB on average than do their less-advantaged peers.

Social indicators perspective

Although social-indicators research has existed for decades, its growth and prominence has increased greatly over time. Social-indicators research focuses on the quality of life in every dimension, and the relationships between societal characteristics and quality of life. Most analysis in this field is done on an aggregate level, rather than on an individual level. For example, whereas individual-level studies of SWB might focus on the effects of household income, marital status, and gender on the perceived quality of life, a typical social-indicators study would focus on the impact of gross domestic product per capita, rates of marriage, and the political rights of women on average levels of SWB. Two major foci of social-indicators

research are on monitoring the change in quality of life over time and on cross-national research, both of which permit examination of the effects of macro-level social structures and processes on quality of life.

Conceptual Framework and operationalizing measures

The vast majority of research on SWB at the individual level focuses on relationships between objective life conditions and perceived life quality. We would like to understand what determines SWB later in life. For this purpose, based on theoretical orientations and results of previous researches, we have created a model for the determinants of SWB later in life (see fig.1). All predictors in the model have been demonstrated to be significantly related to SWB in previous research. But no study has reported the interrelation or unique effects of the predictors on perceived well-being later in life. The model proposed here is a path model and thus includes hypotheses about both indirect and direct effects of the predictors. Although some of the hypothesized mediating effects have been examined in previous research, many others have yet to be looked into.

Fig.1. Model of the determinants of SWB later in life at the individual level
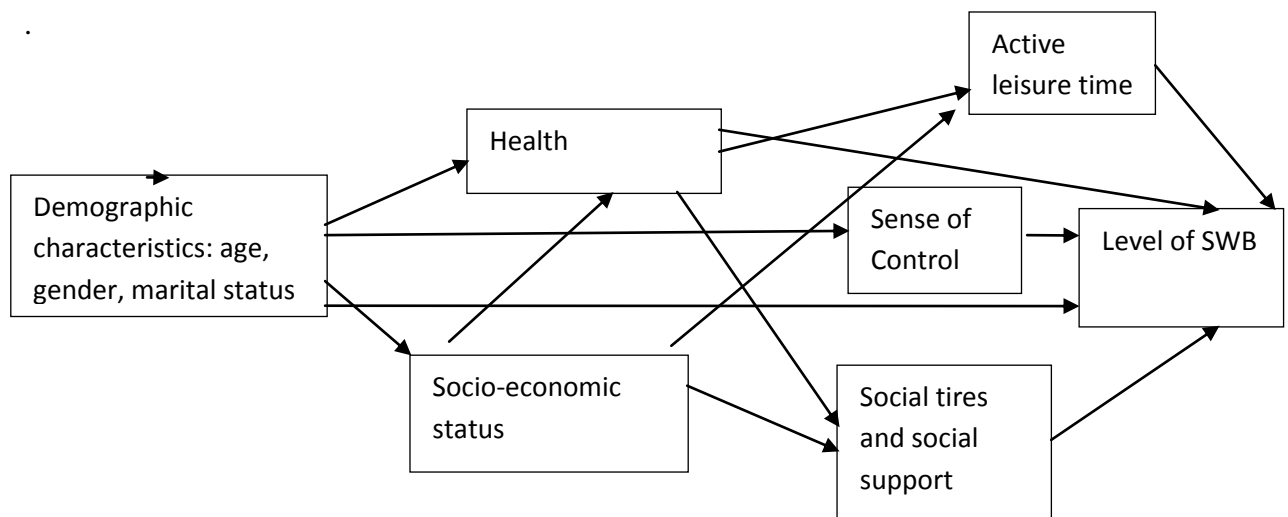
The terms SWB, happiness, and life satisfaction are often used interchangeably. Nevertheless, there are conceptual differences among them. The key factor used to distinguish among them is stability (George, 2006). Life satisfaction is conceptualized as a relatively stable orientation towards life that is not affected by transient moods. Happiness is viewed as less stable and less cognitive than life satisfaction.

Campbell, Converse, and Rodgers (1976) reported that age patterns of life satisfaction and happiness differ somewhat. Based on data from a representative national sample, they compared young, middle-aged, and older adults. Older adults were the most satisfied with their lives, middle-aged adults were the least satisfied, while young adults were intermediate. With regard to happiness, however, young adults were the happiest, the middle-aged were least happy, and older adults were intermediate.

We consider SWB as a combination of happiness and life satisfaction. These specific indicators of SWB are more alike than different and they basically measure the same thing – an individual's subjective perception that life as a whole is good.

Our outcome variable for the individual level of analysis is the level of SWB of people older than 60 years. The WVS questionnaire includes two questions that have been used to estimate the subjective well-being of people ('All things considered, would you say you are: very happy, quite happy, not very happy, not at all happy?' and 'All things considered, how satisfied are you with your life as a whole these days? Using this card on which 1 means you are "completely dissatisfied" and 10 means you are "completely satisfied", where would you put your satisfaction with your life as a whole?'). We rescaled these variables into a range from 0 to 1 and multiplied them. The descriptive statistics of the dependent variable and all explanatory variables are presented in the Appendix.

Explanatory Variables for Individual-Level Analysis

Age

Campbell, Converse, and Rodgers (1976) were among the first to demonstrate that older adults are more satisfied with their lives on an average than are middle-aged and younger adults, a pattern that remains true in more recent studies (see George, Okun, and Landerman, 1985). Even in samples restricted to middle-aged and older persons, SWB levels increase with age (Steverink, Westerhof, Bode, and Dittmann-Kohli, 2001; Tran, Wright, and Chatters, 1991; Mroczek and Spiro 2005). The studies examined 22 years of data in the all-male Normative Aging Study, and reported that SWB peaked at age 65 and declined slightly thereafter. The contradiction between cross-sectional and longitudinal studies is probably more apparent than real, even with gradual decreases in SWB later in life, levels of life satisfaction remain high.

Gender

Inglehart (2002) examined the joint effects of gender and age on SWB using data from 65 countries. His results indicated that gender is related to SWB, but that the pattern is not clear unless the interaction between gender and age is estimated. Specifically, prior to age 45, women report higher SWB than men. At age 45 and older, however, men report higher SWB, and this gap widens at older ages. Pinquart and Soerensen (2001) also reported that the gender gap in SWB widens with age. Other writers (Bury, 1995; Ginn and Arber, 1999) have expressed concern that the gendered dimension of ageing and older age has been neglected. To discover whether gender has any impact on the level of SWB, we used a dummy variable for female gender in our model.

Marital Status

Married adults of all ages report higher levels of SWB than unmarried adults.[3] Nonetheless, limited evidence suggests that there is more to be learned about this relationship. George et al (1985) observed age in relation to marital status, where marital status seemed to be a less powerful predictor of SWB among persons aged 65 years and older than among those between 40 and 64 years of age. In a study of older Swedes, Jakobsson, Hallberg, and Westergren (2004) reported that the relationship between marital status and SWB was explained by living arrangements. Specifically, living alone, rather than with a spouse, predicted lower SWB.

Widowhood is common later in life, especially among older women. Researchers consistently report that widowhood triggers significant declines in SWB, but levels of life satisfaction typically rebound to pre-widowhood levels within 1 to 2 years (Lucas, Clark, Georgellis, and Diener, 2003; Mastekaasa, 1994). In this study we used four dummy variables to measure the influence of marital status on the level of SWB of older people: married, widowed, divorced, and never married. Married is used as a reference category.

Socioeconomic Status

Among middle-aged and younger adults, income is the strongest single predictor of SWB (Campbell et al, 1976), while among older adults income usually ranks second in its power to explain differences in SWB. In another meta-analysis of 286 studies, Pinquart and Soerensen

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[3] See Pinquart and Soerensen (2001) for a meta-analysis based on 300 studies, and Diener, Gohm, Suh, and Oishi (2000), which is an analysis based on more than 59,000 respondents in 45 countries.

(2000) reported that education and income are both strong predictors of SWB during the late life period, with income being the stronger of the two. However, there are occasional exceptions to this pattern. For example, Bowling et al (2002) reported that SES was not a significant predictor of SWB in their sample of older British adults. Recognizing that this is an unusual finding, the authors suggested that it reflects the higher financial and healthcare benefits offered by the British welfare state compared to other countries, especially the United States. Satisfaction with financial resources is also a significant predictor of SWB, even when education and income are statistically controlled (Jakobsson et al, 2004; Morris, 1997). We consider that socioeconomic status is a more 'proximal' predictor of SWB than demographic characteristics and plays an intervening role between some demographic characteristics and SWB. In this research, we used a 10-point scale for the variable of satisfaction with a household's financial situation. We used this variable to test the hypothesis about social comparisons. People who have downward social comparisons are more satisfied with their financial situation and have a higher level of SWB.

Health

The vast majority of studies of late-life SWB find that health is the strongest single predictor.[4] Self-rated health is the measure of health used in most studies and in our study we also used a five-point scale to indicate one's satisfaction with the state of his or her health.

Social Networks and Support

Overall, social relationships and social support provided by family and friends are strong predictors of late-life SWB. There is growing evidence that social networks and social support have an impact on a person's physical and mental health and their risk of institutionalization (Bosworth et al, 2000; Hinkikka et al, 2000). Therefore, we included in our model two 10-point scales that indicate the quality of relationships with family and with friends – the importance of family and the importance of friends. We also included in our model a 10-point scale for a variable representing the importance of leisure, which indicates that a person has an active life and a wide social network.

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[4] See Bowling et al (2002) for results of a British sample. See George et al (1985), Kirby, Coleman, and Daley (2004), Morris (1997), and Pinquart and Soerensen (2000) for a meta-analysis. See Steverink et al. (2001) for a German sample, Tran et al (1991) for an African-American sample, and Windle and Woods (2004).

Psychosocial Mediators of SWB

A largely separate body of research examines the effects of psychosocial characteristics on SWB. In this context, 'psychosocial characteristics' refer to the ways that individuals cognitively appraise and process their experiences. Psychosocial characteristics are hypothesized to have both direct effects on SWB and to partially mediate the effects of objective life conditions on SWB.

'Sense of control' refers to the extent to which individuals believe that they can control their lives. There is reasonably strong evidence that a sense of control is a significant mediator of the effects of objective life conditions on the SWB of older adults. Bisconti and Bergeman (1999), for example, report that a sense of control mediates the effects of social support on life satisfaction. In this study, a sense of control measured on a 10-point scale as a response to the following prompt: 'Some people feel that they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them. Please use a 10-point scale, where 1 means "no choice at all" and 10 means "a great deal of choice" to indicate how much freedom of choice and control you feel you have over the way your life turns out.'

Regions

In this paper, we also investigate whether socio-cultural, politico-economic, and historical contexts influence the level of SWB among older people. We suggest that geopolitical boundaries have a strong association with levels of SWB. Inglehart and Welzel (2005) created a cultural map of the world based on the World Values Survey. This map demonstrates the level of modernization for countries. Based on a factor analysis, they placed nations on a scale of two dimensions according to degree of religiousness (traditional/secular-rational values) and economic advancement (survival/self-expression values). The traditional/secular-rational values dimension is based on the degree of the importance of religion to society. The second dimension reflects the degree of economic advancement – whether the accumulation of wealth in advanced societies in previous generations increased the probability that younger generations would take survival for granted. Including a geopolitical map is necessary to gauge the macro factor. We formed five geopolitical groups based on the Inglehart-Welzel Cultural Map of the World (Inglehart and Welzel, 2005). The two dimensions of the map reflect the degree of religiousness and the level of economic development. We grouped several types of nations that share a close geopolitical context: (1) Protestant countries of Europe with the highest secular values and an

advanced level of economic development, (2) ex-communist countries with high secular values and a relatively advanced level of economic development, (3) poor African and South Asian countries with a high level of traditional values, (4) Latin America countries with a moderately high level of traditional values and moderately advanced level of economic development, (5) Catholic countries of Europe with moderately high secular-rational values and an advanced level of economic development, (6) Buddhist countries, and (7) English-speaking countries – USA, Canada, New Zealand, Australia, and the United Kingdom – with high secular values and an advanced level of economic development. In this study, the ex-communist group is used as a reference category.

Analytical strategy

The operationalization of the conceptual framework required each domain or set of items to be entered into a multiple linear regression equation. The logic of the sequence had a crude temporal division on which aspects of satisfaction with health and financial resources, social supports and social tiers, psychosocial mediators of SWB, and geopolitical boundaries were overlaid. The initial base model simply controlled age, gender, and marital status. To this satisfaction with a household's financial situation and satisfaction with health were added. Then social network and social support markers were entered, along with the sense of control over one's own life. Finally geopolitical regions were also added to the model. The items for each domain were entered as a 'block'. While this approach is empirically driven, it starts with the inclusion of model variables that have been scoped from a theoretical perspective.

Findings

Table 1 presents the estimated unstandardized regression coefficients for each step in the analysis. The base model shows that age has a weakly significant positive influence on the level of SWB of older people. Marital status is a strong predictor of SWB for older people. Married older people have a significantly higher level of SWB. Widowhood and divorce significantly decrease the level of SWB. Older people who have never been married have an even lower level of SWB than divorced people. This effect was present at all stages of the analysis irrespective of the domain indicators that were added to the model. Gender did not reveal a consistent effect on this stage of analysis, but in the following stage and in the final model the coefficient approached significance – there is a small difference in the level of SWB between genders. Demographic characteristics of older people explain only about 2% of the variance.

The second-stage analysis revealed a modest effect of financial achievements and the state of health over and above age, gender, and marital status. A good state of health and satisfaction with the financial situation in a household are significantly positive related to the level of SWB. These variables are the strongest predictors of SWB levels. It is important to mention that subjective satisfaction with a household's financial situation has a stronger association with SWB levels than does income. This result is testament of the fact that social comparison theory is a more adequate explanation for differences in the level of SWB for older people than discrepancy theory is.

Social ties and support from friends and family are very important in explaining higher levels of SWB among older people. The degree of social support and the importance of family in a person's life are related to SWB levels even more than marital status is because family ties indicate the quality of relationships within a family, whereas marital status testifies only to the fact that a family exists. The importance of leisure also significantly increases one's level of SWB. We can interpret this fact as the importance given by a person to time that is actively and interestingly spent. According to the strategic investments of resources theories, older people who are able to avoid less rewarding relationships and find possibilities for new relationships and self-realization have higher levels of SWB. Our results confirm the adequacy of these theories for investigating and explaining the level of SWB later in life.

Sense of control – the feeling that one can rule the events of his or her life – has a significantly positive impact on the level of SWB for older people. The standardized coefficients show us that it is even a stronger predictor of SWB than social networks and support from friends and family are.

In the final model, the explained variance reached 48%. The regional model shows that older people from ex-communist countries have the lowest level of SWB. Older people from English-speaking countries and protestant countries have, by contrast, the highest level of SWB. It is important to note that older people from Catholic countries, including Latin American countries, also have a high level of SWB. These results allow us to suggest that the degree of modernization influences the level of SWB very strongly. Inglehart, Foa, Peterson, and Welzel (2008) examined trends in happiness for 52 countries between 1981 and 2007. Average levels of happiness increased in 45 of the 52 countries. Significant predictors of increasing happiness are raising economic development, democratization, and social tolerance. Our results suggest that these conclusions hold true for the older generation as well. Therefore, low levels of SWB

among older people from poor African countries can be explained by low levels of economic development. Low levels of SWB of older people from ex-communist countries can be explained by low levels of democratization.

Table 1. Results of the multiple linear regression analyses for SWB of individuals who are 60 years of age and older (unstandardized coefficients)

Const	0.375* (0.028)	-0.108* (0.026)	-0.3* (0.03)	-0.358*(0.03)	-0.344* (0.031)
Age	0.002* (0.000)	0.002* (0.000)	0.002* (0.0000)	0.002* (0.000)	0.001* (0.000)
Female	0.006 (0.005)	0.017* (0.005) *	0.012* (0.005)	0.015* (0.005)	0.014* (0.005)
Marital Status					
Widow	-0.09* (0.007)	-0.038* (0.006) *	-0.034* (0.006)	-0.037* (0.006)	-0.033* (0.006)
Divorced	-0.026* (0.011)	-0.02*(0.01)	-0.025* (0.010)	-0.031* (0.010)	-0.041* (0.010)
Never Married	-0.028* (0.013)	-0.025* (0.011)	-0.023* (0.011)	-0.025* (0.011)	-0.032* (0.011)
Achievements					
Satisfaction with financial resources		0.429* (0.009)	0.413* (0.009)	0.374* (0.009)	0.343* (0.010)
Satisfaction with health state		0.377* (0.011)	0.346* (0.011)	0.319* (0.011)	0.287* (0.011)
Income		0.024* (0.01)	0.02* (0.010)	0.011 (0.010)	0.023* (0.010)
Social network and social support					
Importance family			0.121* (0.017)	0.109* (0.017)	0.107* (0.017)
Importance friends			0.053* (0.010)	0.054* (0.010)	0.047* (0.010)
Importance leisure			0.084* (0.009)	0.071* (0.009)	0.058* (0.009)

Sense of Control				0.175* (0.009)	0.165* (0.009)
Catholic countries of Europe					0.05* (0.010)
Buddhist countries					0.066* (0.008)
Eanglish-speaking countries					0.124* (0.009)
R sqr	0.016	0.388	0.402	0.474	0.477
N	9597	9597	9597	9597	9597

*-significant value of coefficient, p<0.05,

Reference category is married people; reference category is Region 2 (Ex-communist country)

We can assume that, in transition periods, which ex-communist countries are in right now, the level of SWB for older people is further reduced by the fact that their values are different from society's current values.

The results of our research demonstrate that the lives of older people in contemporary societies have changed and, therefore, our understanding of their lives must also change. Increased longevity and an early exit from the labor market mean that the current post-work superannuated population can no longer be characterized by ill health or poverty. For many people, late life is a time for self-realization and leisure. For older people, the country in which they live and the levels of democracy, freedom, and tolerance are very important. It is, therefore, necessary to look beyond the traditional prism of health and pension adequacy to understand what does and does not contribute to a high level of SWB for older people.

Regional models for the level of late-life subjective well-being at an individual level

We have created a separate regressive model for each geopolitical region, since regional features have significant influence on the level of subjective well-being later in life. A comparison of regional models allows us to analyze interactive effects and to understand how objective life conditions impact the level of subjective well-being for older people.

Table 2 Regional regression models of SWB for individuals who are 60 years of age and older (unstandardized coefficients)

	Protestant countries of Europe	Ex-communism countries	Poor African and Asian countries	Latin America	Catholic countries of Europe	Buddhist countries	English-speaking countries
Constant	-0.389*(0.074)	**-0.195*** **(0.067)**	**-0.398*** **(0.082)**	**-0.245** **(0.135)**	**-0.386*** **(0.103)**	**-0.449*** **(0.087)**	**-0.156** **(0.097)**
Age	**0.002*** **(0.001)**	0.00 (0.001)	0.001 (0.001)	0.002 (0.002)	**0.002*** **(0.001)**	**0.001*** **(0.001)**	-0.001 (0.001)
Female	0.002 (0.011)	0.025* (0.010)	**0.03*** **(0.013)**	-0.001 (0.012)	0.005 (0.015)	0.017 (0.012)	0.004 (0.012)
Widow	**-0.058*** **(0.014)**	-0.018 (0.011)	-0.013 (0.014)	**-0.048*** **(0.024)**	**-0.064*** **(0.019)**	-0.029 (0.016)	**-0.048*** **(0.016)**
Divorced	**-0.036*** **(0.018)**	-0.019 (0.027)	0.009 (0.031)	-0.05 (0.035)	**-0.09*** **(0.027)**	0.024 (0.042)	**-0.081*** **(0.02)**
Never Married	-0.005 (0.023)	-0.052 (0.024)	0.021 (0.032)	-0.016 (0.037)	**-1.00*** **(0.029)**	0.008 (0.043)	**-0.122*** **(0.03)**
Income	0.007 (0.024)	0.015 (0.024)	**0.067*** **(0.027)**	**0.045** **(0.045)**	-0.032 (0.033)	**0.093*** **(0.027)**	**0.028** **(0.024)**

Satisfaction with financial resources	0.292* (0.024)	**0.341*** **(0.022)**	**0.395*** **(0.022)**	**0.238*** **(0.036)**	**0.327*** **(0.033)**	**0.428*** **(0.027)**	**0.265*** **(0.027)**
Satisfaction with health state	**0.338*** **(0.027)**	**0.242*** **(0.025)**	**0.318*** **(0.024)**	**0.225*** **(0.05)**	**0.293*** **(0.037)**	**0.227*** **(0.03)**	**0.292*** **(0.03)**
Importance of family	**0.091*** **(0.038)**	**0.094*** **(0.036)**	**0.108*** **(0.055)**	0.087 (0.069)	**0.123*** **(0.056)**	**0.118*** **(0.038)**	**0.172*** **(0.067)**
Importance of friends	**0.067*** **(0.027)**	**0.091*** **(0.07)**	0.039 (0.021)	0.041 (0.039)	0.06 (0.032)	0.015 (0.029)	**0.057*** **(0.033)**
Importance of leisure	**0.125*** **(0.023)**	0.019 (0.07)	0.048 (0.018)	**0.138*** **(0.036)**	0.036 (0.031)	0.032 (0.025)	**1.000*** **(0.027)**
Sense of Control	**0.0190*** **(0.024)**	**0.076*** **(0.017)**	**0.86*** **(0.02)**	**0.222*** **(0.036)**	**0.215*** **(0.032)**	**0.112*** **(0.025)**	**0.245*** **(0.029)**
Church attendance	0.027 (0.016)	0.000 (0.010)	**0.038*** **(0.016)**	0.015 (0.022)	0.034 (0.019)	0.006 (0.016)	**0.031*** **(0.015)**
R sqr	**0.353**	**0.334**	**0.439**	**0.233**	**0.388**	**0.383**	**0.293**
N	**1712**	**1707**	**1692**	**720**	**715**	**1238**	**1385**

*-significant value of coefficient, p<0.05,

Table 2 presents the regression coefficients for each regional model. From this table we can see that in protestant European countries that are the most developed economically and have the highest level of secular values there are no gender differences in the level of subjective well-

being for older people. Furthermore, the results of our research show that gender differences in the level of subjective well-being exist only in post-communist countries and in poor African and Asian countries.

Thus, during the process of modernization, men and women get equal opportunities to be satisfied with their lives later on in life, and this satisfaction increases with age.

In protestant European countries, widowhood and divorces decrease the level of subjective well-being later in life. This cannot be related to those people who have never been married because their level of subjective well-being does not differ from the level of subjective well-being for married people.

 In countries that belong to one geopolitical region or another, the absolute value of income does not determine the level of subjective well-being for older people. To be satisfied with life, it is enough to just be satisfied with one's financial situation. It is important to highlight that in protestant European countries having a good state of health is a more significant predictor of the level of subjective well-being than a having a good financial state is. This result is specific for older people of a region. Thus, we can suppose that, with the process of modernization, financial well-being would have less influence on subjective well-being for older people.

Since the countries of northern Europe have a high level of secular values, church attendance is not associated with the subjective well-being of older people in these countries. Social connections, support from friends and family, and a belief that people are able to choose and determine their life are all important factors that may have influence on subjective well-being in these countries.

Older people from post-communist countries – countries with a high level of secular values and relatively low economic development – have the lowest level of subjective well-being, and this level does not depend on age, meaning that individuals who are 60 years of age and older have the same, rather low level of subjective well-being as everyone else does.

In ex-communist countries women are more satisfied with their lives than men are. This is probably connected with the fact that older women obtain new social roles. For example, that of a grandmother or a mother-in-law, that have high social status in the ex-communist countries.

Income does not determine the level of subjective well-being among older people in ex-communist countries, because the majority of older people from these countries have the same,

relatively low level of income. The level of subjective well-being for older people is determined by their state of health, support from friends and family, and sense of responsibility for one's own life. Church attendance does not affect levels of subjective well-being. This also refers to the leisure time of older people. In post-communist countries older people do not have many opportunities to enjoy an active and diverse leisure and that is why leisure time appeared to be an insignificant variable in this region.

In poor African and Asian countries, traditional and religious values are significant, whereas these countries are not developed economically. In these countries, the level of subjective well-being for older people depends on people's religiousness and their involvement in a church community's life, considering the fact that the regression coefficient of the variable that illustrates the church attendance is significant. Age and marital status are not associated with levels of subjective well-being late in life. In the majority of poor African and Asian countries, the expectancy of life is small, and most people do not reach old age. The absolute value of income is particularly important for older people from poor countries, not just satisfaction with their financial state. This is what distinguishes the older people of these countries from older people from most other countries.

In Latin America, older people have a rather high level of subjective well-being. Our research demonstrates that this level does not depend on objective life conditions. Age, gender, income, marital status (excluding widowhood) practically do not affect life satisfaction for older people in these countries. Social connections with family, friends, and involvement in a church community do not affect the level of SWB among older people in Latin America either. Life satisfaction in Latin America depends on satisfaction with one's financial situation, his or her state of health, the way leisure time is spent, and a sense of control.

Catholic European countries and English-speaking countries, such as the USA, Canada, New Zealand, and Australia, are characterized by highly developed economies and a relatively low level of secular values compared to protestant European countries. The level of subjective well-being of older people in these countries depends on the same factors. Married people have a higher level of subjective well-being than widowed or divorced individuals and people who have never been married. Men and women have the same level of subjective well-being later in life. Absolute income value is not related to the level of subjective well-being later in life, though satisfaction with one's financial situation, health, and support from family and friends have a significant positive effect on the SWB of older people in these countries. The distinction between

catholic European countries and English-speaking countries is that in latter the level of subjective well-being does not depend on age, while the former people feel themselves happier and more satisfied with their life with age. Besides, older people from English-speaking countries appreciate their leisure time in contrast to catholic countries. All these conclusions reveal that older people from English-speaking countries tend to continue a youngish lifestyle, meaning that they are active despite being old. In catholic countries, older people are respected and their lifestyle differs from that of younger people.

Income, both in absolute terms and in terms of one's subjective satisfaction with financial state, one's health state, and social connections with family are associated with the level of subjective well-being for older people in Confucian countries. Marital status does not affect the level of older people's subjective well-being, neither does the support of friends and leisure time opportunities.

The results from the research on the level of subjective well-being for older individuals allow us to make a conclusion that the higher the level of modernization, meaning the more it is economically developed and the more widespread emancipating values are present in society, the higher the number of factors that determine the level of subjective well-being later in life. During the process of modernization, the factors that characterize a person's lifestyle, such as social relationships, leisure opportunities, and possibilities to choose and control one's life, gain more importance, and demographic factors, such as gender, ethnics, and age, become less important.

After analyzing the level of subjective well-being at the individual level, we examine the factors that determine subjective well-being at the country level later in life. In other words, we seek to understand in what countries successful aging is possible.

Aggregate studies of SWB later in life

Unfortunately, few cross-national studies of SWB focus on older adults or test for age interactions in samples that are heterogeneous with regard to age. Nonetheless, this research provides strong evidence that cross-national studies are a fruitful strategy to better understand the effects of macro-structural factors on SWB.

Veenhoven (1996) identified four significant predictors of SWB across these 48 countries: affluence, measured by GDP per capita; average levels of education; democratic political systems; and social tolerance. Veenhoven (2009) recently replicated his earlier study using data collected from 2000 to 2002 from 92 nations. In this study, GDP per capita, the extensiveness of

public institutions, national productivity, and the stability of the political system were significant predictors of SWB.

Diener, Diener, and Diener (1995) examined the relationships between structural factors and SWB using data from 55 countries. Similar to Veenhoven, they found that population affluence, individualism, and the protection of human rights predicted higher national SWB averages.

Several recent studies used longitudinal data to examine SWB at the population level. Hagerty (2000) examined the effects of both per capita income and income inequality, defined as the difference in income between the richest and poorest members of society, on SWB. He used data from eight countries spanning 25 years. GDP was the strongest predictor of increasing SWB over time, but income inequality was significant. Using a larger sample of 21 countries, but only two times of measurement with a span of two years apart, Hagerty and Veenhoven (2003) also found that rising GDP was the strongest predictor of increases in SWB.

In our study, in order to investigate the level of late-life SWB at the national level, we used the value of the logarithm of GNP per capita in the country, the index for the inequality human development (IHDI), a rule of law index, and life expectancy in the country. IHDI is published by the United Nation Development Programme, and the rule of law index is published by World Bank.

Table 3 presents the results of a multiple regression analysis on the mean value of SWB levels for individuals who are 60 years and older. Model 1 demonstrates the effect of GNP per capita on the level of SWB for older people. This model shows us that the economic development of a country explains 25% of the variance of SWB later in life.

We added the inequality human development index (IHDI) to Model 2. This index is a 'measure of the average level of human development of people in a society after inequality is taken into account. It captures the HDI of the average person in society, which is less than the aggregate HDI when there is inequality in the distribution of health, education, and income. Under perfect equality, the HDI and IHDI are equal. The greater the difference between the two, the greater the inequality. In that sense, the IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the potential human development that could be achieved if there were no inequality. We created a variable that represents the difference between the HDI and the IHDI and expressed it as a percentage. We included the logit of this variable to our regression model.

The explained variance in Model 2 reached 47%. The inequality in education, health, and income in a country's population has a strong negative effect on the well-being of older people. Higher levels of GNP per capita cannot compensate for the negative impact of inequality. In addition, the rule of law index does not substantially increase explained variance, and, therefore, we dropped this variable from our analysis. Instead, the value of life expectancy in a country was included in Model 4. The results of the analysis show that this variable does not have a significant influence on the level of SWB for older people.

Table 3. Results of a country-level multiple regression analysis for the level of SWB later in life.

	Model 1	Model 2	Model 3	Model 4
Constant	0.292*	-0.85*	-1.2*	-0.89*
GNP per capita	0.15*	0.328*	0.112*	0.282*
Index inequality		-0.302*	-0.337*	-282*
Rule of law index			0.095*	
Life expectancy				0.02
R2	0.255	0.47	0.49	0.50
N	54	52	46	44

So, the best model is Model 2. This model explains almost 50% of the variance using only two parameters. The strong effect of inequality on the distribution of health, education, and income, and on the level of SWB later in life forces us to conclude that the degree of modernization is very significant for the well-being of a country's older people.

Conclusion

The rationale for this analysis was that the socio-demographic characteristics and life situation of older people in the contemporary world have changed, and hence our understanding of them needs to change as well. For many people, old age is a period of self-realization, leisure, and new experiences. To understand what does and does not contribute to SWB later in life, it is necessary to look beyond the traditional foci of health and pension.

The results of our study confirm that the SWB of older people is not reducible to any single factor, nor is there a simple division between the affluent and the poor. Instead, many things contribute to the level of SWB, and the inter-relationships among them are complex. Both a good state of health and satisfaction with one's financial situation have a significant positive influence on SWB levels. It is important to note that it is one's satisfaction with his or her financial situation that plays a significant role in the level of SWB, and not the absolute value of income.

Social ties and the support of friends and family are very important factors for higher levels of SWB among older people. Social support and the importance of family in a person's life influence the level of SWB stronger than a person's marital status. Veenstra (2000) studied the negative relationship between the frequency of social contacts with friends and family and the quality of one's health and life. This fact leads us to conclude that a social contact per se should not always be seen as beneficial. Indeed, it may even be a source of conflict and stress for some people. Therefore, to have a high level of SWB, it is more important to have a good relationship with one's family than to simply be married.

A sense of control − the feeling that a person can control the events of own life − has a significant positive association with the level of SWB for older people. It is an even stronger predictor of SWB than the presence of social networks and support.

Additionally, for older people, the level of democracy in the country where they live − its level of inequality, freedom, and tolerance − is very important for SWB. During the process of modernization, people desire to be active and happy, to look younger, and to be helpful for as long as possible − this is the meaning of successful aging. A society has to understand these needs and provide opportunities accordingly so that successful aging can occur.

Appendix.

Table 4. Descriptive Statistics.

	Min	Max	Protestant countries of Europe (N=1740)		Ex-communism countries (N=1744)		Poor African and Asian countries (N=1822)		Latin America (N=844)	
			Mean	St. div.	Mean	St. div.	Mean	St. div.	Mean	St. div.
happiness	.00	1.00	.7230	.21826	.4758	.26341	.6646	.27468	.6956	.25586
life satisfaction	.00	1.00	.7294	.20833	.4596	.26828	.5687	.29312	.7388	.25252
Swb = happiness*life satisfaction	.00	1.00	.5543	.25793	.2534	.23036	.4197	.30012	.5428	.29315
Income (scale)	.00	1.00	.3705	.24185	.3043	.22901	.3402	.24465	.2967	.24591
importance family	.00	1.00	.9426	.15355	.9568	.13179	.9739	.10866	.9512	.14786
importance friends	.00	1.00	.8247	.20759	.7162	.26798	.7483	.27885	.7021	.30528
importnce leisure	.00	1.00	.7200	.24376	.5974	.28993	.5942	.32973	.7086	.26949
Satisfaction with health	.25	1.00	.6564	.20997	.4689	.20053	.6072	.24074	.6181	.20939
Sense of control	.00	1.00	.6850	.22313	.5850	.29660	.6443	.29509	.7549	.25494
Age	60.00	98.00	69.547	6.7626	69.09	6.50892	67.6327	6.9261	68.148	6.66509
Church attendance	.00	1.00	.3529	.32711	.4748	.31709	.7035	.36068	.6264	.34758
Satisfaction with financial situation	.00	1.00	.6939	.24124	.3265	.25895	.4886	.29192	.5674	.29602

	Min	Max	Catholic countries of Europe (N=773)		Buddhist countries (N=1401)		English-speaking countries (N=1414)		Total	
			Mean	St. div.	Mean	St. div.	Mean	St. div.	Mean	St. div.
happiness	.00	1.00	.6614	.21065	.6746	.23022	.8038	.20294	.6679	.25944
life satisfaction	.00	1.00	.6361	.20984	.6381	.24307	.7593	.20285	.6393	.26732
Swb = happiness*life satisfaction	.00	1.00	.4455	.23282	.4572	.25639	.6310	.25707	.4668	.28905
Income (scale)	.00	1.00	.2962	.23730	.3494	.23893	.3802	.27886	.3379	.24608
importance family	.00	1.00	.9652	.12459	.9168	.16728	.9794	.09573	.9562	.13450
importance friends	.00	1.00	.7775	.22760	.7120	.22546	.8653	.19588	.7657	.25292
importnce leisure	.00	1.00	.6728	.24972	.6241	.24992	.7541	.23525	.6610	.28029
Satisfaction with health	.25	1.00	.6370	.19993	.6119	.21548	.7143	.21027	.6089	.22710
Sense of control	.00	1.00	.6271	.22645	.6178	.25671	.7484	.21023	.6628	.26596

Age	60.00	98.00	69.2508	6.9773	67.364	5.83494	70.395	7.71103	68.761	6.86814
Church attendance	.00	1.00	.4717	.36998	.4545	.35386	.4426	.39029	.5118	.37014
Satisfaction with financial situation	.00	1.00	.5565	.23125	.5770	.24906	.7024	.24041	.5490	.29065

Table 5. Frequencies.

	Protestant countries of Europe (N=1740)	Ex-communism countries (N=1744)	Poor African and Asian countries (N=1822)	Latin America (N=844)	Catholic countries of Europe (N=773)	Buddhist countries (N=1401)	English-speaking countries (N=1414)	Total
male	49.4%	42.8%	54.5%	47.5%	47.5%	50.4%	48.0%	48.8%
female	50.6%	57.2%	45.5%	52.5%	52.5%	49.6%	52.0%	51.2%
married	61.9%	59.2%	66.1%	56.1%	63.8%	79.9%	65.1%	64.6%
divorced	9.7%	3.2%	3.0%	7.8%	7.3%	1.8%	9.6%	5.8%
widow	21.6%	34.5%	27.9%	27.0%	22.4%	16.2%	21.3%	25.0%
never_married	6.8%	3.1%	3.0%	9.0%	6.5%	2.0%	4.0%	4.6%

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