

SPIRITUAL FACTOR AS AN IMPORTANT ELEMENT OF LIFE SATISFACTION IN OLD AGE

ČIMBENIK DUHOVNOSTI KAO VAŽAN ELEMENT ZADOVOLJSTVA ŽIVOTOM U STAROSTI

Boris Miha Kaučič, Bojana Filej, Barbara Toplak Perović, Marija Ovsenik

Alma Mater Europaea – ECM, Maribor, Slovenia

Alma Mater Europaea – ECM, Maribor, Slovenija

Abstract

This article focuses on the question of the influence of the spiritual factor on life satisfaction. Spiritual factor includes two indexes - self-esteem and self image as well as spirituality. Both include more variables. We have studied self-esteem with Rosenberg standardized questionnaire, self image and spirituality were studied by evaluating variables (feelings of inferiority, the adoption of the external appearance, the meaning of life, meditation, prayer) and satisfaction with life with »Satisfaction with Life Scale (SWLS)«. The survey was based on a quantitative methodology and on a non-experimental method. The sample size was determined based on the proportional stratification according to the size of population 65 years and over according to the data of Statistical Office of the Republic of Slovenia for 2012. The study involved 1,064 older people aged 65+ living at home and in social welfare institutions. We received 656 correctly completed questionnaires, representing 61.6% of the study population (home: 380 - 57.9%; social welfare institution: 276 - 42.1%). For the analysis of causal effects, we used advanced statistical methods (propensity score methods). We have found out that the index of self-esteem and self image as well as spirituality is strongly associated with life satisfaction as the highest average value of a multiple R-square of the spiritual factor was $R^2 = 0.37$. Spiritual factor is therefore an important element of satisfaction with life in old age, because it allows the old person to strike a balance for peaceful life.

Sažetak

Članak je usredotočen na pitanje utjecaja čimbenika duhovnosti na zadovoljstvo sa životom. Čimbenik duhovnosti uključuje dva indeksa: samopoštovanje te sliku o samom sebi i duhovnost. Oba indeksa uključuju više varijabli. Samopoštovanje smo proučavali pomoću Rosenbergovog standardiziranog upitnika, sliku o samom sebi i duhovnost pomoću ocjene varijabli (osjećaj manje vrijednosti, prihvaćanje vanjskog izgleda, smisao života, meditacija, molitva), a zadovoljstvo životom pomoću ljestvice Satisfaction with Life Scale (SWLS). Istraživanje smo zasnovali na kvantitativnoj metodologiji i ne-eksperimentalnoj metodi. Veličinu uzorka smo odredili na osnovi proporcionalne stratifikacije glede veličine broja populacije starije od 65 godina, prema podacima Statističkog ureda Republike Slovenije za 2012. godinu. Istraživanje je obuhvatilo 1064 osoba u dobi od 65 i više godina, koji su živjeli kod kuće i u zavodima. Primili smo 656 pravilno ispunjenih upitnika, što iznosi 61,6 % u istraživanje uključene populacije (kod kuće 380 – 57,9%; zavodi: 276 – 42,1%). Za analizu uzročnih učinaka korištene su napredne statističke metode sklonosti (Propensity Score Methods). Zaključili smo da su indeksi samopoštovanja i slike o sebi i duhovnosti vrlo jako povezani sa zadovoljstvom životom, jer najviša prosječna vrijednost multipl R-kvadrata za čimbenik duhovnosti iznosi $R^2=0,37$. Dakle, čimbenik duhovnosti je vrlo važan element zadovoljstva životom u starosti, omogućujući starijoj osobi postizanje ravnoteže za miran život.

1 INTRODUCTION

Life satisfaction is an important driving force in life and an important factor of an individual's personality stability; it is a synthetic, multi-layered indicator of quality of life or personal well-being /1/. J. Ramovš and Lipar /2/ state, that satisfaction with one's own life is a person's well-being as a result of experiencing one's own life as coherent enough with one's own needs and wishes. A satisfied person has a positive attitude towards their own life. It is all about an individual's evaluation of life, which includes the individual's past as well as the life that is still in front of them. Life satisfaction depends on experiencing oneself, on fulfilling one's goals, on the ability to cope with daily activities, on interpersonal relationships, on harmony with the others, on one's mood, medical condition etc. The authors are of the opinion that life satisfaction is of great importance especially in the old age. Two of the important elements of the quality of life are the self-image and self-esteem. Self-image is a set of concepts and images, that people have about themselves, it is about an individual's experience of oneself /3/. It is a dynamic structure, composed of several dimensions that can change /4/ concurrently with an individual's maturation and ageing /5/. It is a global construct, composed of the global evaluations of oneself /6/. Self-image is a part of our personality composed of all of our opinions about ourselves as well as all of the feelings about ourselves. Each person can have several self-images, such as for instance social self-image, academic self-image, physical and emotional self-image. Self-image is therefore formed in various areas /7/. A major influence on the development of our self-image is exercised by our childhood experiences, our successes, failures, and the attitude that our surroundings shows towards us. Anyone who has a bad self-image is critical towards oneself, is insecure and does not trust in their abilities.

Kristančič /8/ states, that self-image requires from each individual specific efforts to accept themselves. Musek /9/ states that self-image is what we believe we are. He states that self-esteem refers to the personality, which means that it is an individual's mental mirroring of one's personality (in physical, behavioral and mental dimensions). Self-esteem mirrors a critical judgment about the value of oneself. It is a combination of how other people perceive us and of how we perceive their judgments

and the ideal image of oneself /10/. It is the discrepancy between the actual and the ideal image of oneself /11/. The more successful and well-known a person is in their environment, the greater is their self-esteem /12/. Self-esteem is the ability to cope with life's challenges, whereby the sense of anxiety decreases, and general well-being increases /13/. Men and women have different perspectives on self-esteem, which is in men associated with physical appearance, whereas in women it is associated with social behavior /12/. It has also been established that individuals with higher self-esteem achieve better health and well-being than those with lower self-esteem. A decrease in self-esteem can cause a number of health problems, such as depression, anxiety, apathy, and a sense of loneliness /11/. Burns /cited in 14/ sees in the self-esteem a process, where an individual evaluates their achievements and abilities in accordance with their inner standards and values. Rosenberg /cited in 15/ defines self-esteem as a positive or negative stand towards oneself. A positive stand or high self-esteem means, that an individual accepts oneself such as they are, that they respect themselves, that they are happy with themselves, that they feel worthy of respect etc. Self-esteem is a combination of how other people perceive us and how we perceive their judgments. It plays an important role in the mental well-being of the individual. The psychologists have held a debate about whether self-esteem is about the entire attitude towards oneself or is it a multi-dimensional concept /10/.

Musek /9/ states that the research has shown that self-esteem is in western cultures closely linked to life satisfaction. The experience of the cultures and contemporary knowledge show that the spiritual capabilities get enhanced with ageing, whereas physical and mental abilities decline. Spirituality is a promising human ability, which contributes to healthy ageing. In the programs for high-quality, healthy and dignified ageing, in nursing care programs for helpless old people, and in the programs for strengthening intergenerational solidarity it is therefore necessary to take into account spiritual needs and capabilities of people. The concept of the spiritual is very vague and ambiguous. The term »spiritual« is in anthropological sense used for those experiential and behavioral processes, which are human-specific. In this context, we have in mind the entire cultural and existential aspect - that is the spiritual as perceived by people through

the history of human cultures, when they have been looking for an answer to the question of the origin and purpose of their existence and awareness, and the origin and purpose of the existence of the entire reality. In this sense it can be said that spirituality is a basic human orientation on their life pathway and the facilitator of everything into a meaningful whole. The term »spiritual« is often used as the opposite of »material« /16/.

The spiritual aspect is an integral part of our lives, which helps us establish who and what we are, it helps us clarify the purpose of our life and our inner resources /17/. Periček Krapež /18/ states, that spirituality is a dimension, inseparable and inalienable from a human being. She also claims that for most people it is a dimension that is the least known and researched, hidden and invisible to the outer eyes. Without the spiritually awakened individuals, greed, rivalry, the exploitation of fellow people and nature, distrust, fear and hatred would spread fast in the society. Spiritual factor is just one of the factors which are included in the holistic concept of the treatment of a human being. A human being is a whole with a great number of biopsychosocial and spiritual needs. A person as a whole includes the body, the mind, emotions and spirituality, which need to be in equilibrium /19/; in the opposite case the person may experience health problems. In our research two indexes have been set in order to study life satisfaction: self-esteem index, and self-image and spirituality index. With our research we wanted to establish the influence of the spiritual factor on life satisfaction in the old age and its strength of connection.

2 METHODS

2.1 DESIGN

For the purpose of our research work the quantitative research method was used. Due to the complexity of the research problem we chose several quantitative methods, which are intertwined and enable us the research and the displaying of knowledge about the research problem. We used the *deductive method*, which enables us that we on the basis of general findings deduct the characteristics of an individual, *causal non experimental method*, with which we explain and are looking for sources for the present condition, *the descriptive method*, which enables us the description of facts, processes and phenomena, and *comparative method*,

with which we discovered the similarities and differences /20/.

The benefits of the chosen methodology are:

- Standardized and objectified manner of approach towards the research problem;
- The chosen methods enable reliable statistical analysis based on stratification sample;
- Methodological reproducibility and upgrade of research in future,
- Ensuring the anonymity of respondents.

In order to collect the data, we have on the basis of literature drafted a survey questionnaire, which was completed by respondents aged 65 years and above in social care institutions and in the home environment. For measuring life satisfaction we used the scale "Satisfaction with Life Scale – SWLS" /21/, which consists of five claims. The level of agreement with the claims was by the respondents evaluated according to a seven-stage scale (1- strongly disagree; 2- disagree; 3- partially disagree 4- neither agree nor disagree; 5- partially agree; 6- agree and 7- strongly agree). The SWLS scale was translated into Slovenian language and validated. The consent for the conduction of the research was given by Dr. Ed Diener (July 21, 2013). In order to facilitate the understanding of the scoring according to the SWLS scale, we used the following ranges of scores: 30-35 points – very high level of life satisfaction; 25-29 points– high level of life satisfaction; 20-24 points – average level of life satisfaction; 15-19 points – slightly below average level of life satisfaction; 10-14 points– dissatisfied with life, and 5-9 points– very dissatisfied with life.

In order to measure the level of self-esteem, we used the standardized and into Slovenian language translated Rosenberg self-esteem scale, which is publicly accessible. It comprises of 10 claims, which were by the respondents evaluated according to the following scale: 0- do not agree at all, 1- mostly disagree, 2- mostly agree and 3- completely agree.

In order to study self-image and spirituality, seven questions were formed. The reliability of the SWLS scale and the reliability of general questions about the old age and the quality of life were tested by Cronbach alpha coefficient. For the SWLS scale the coefficient was 0,815, for the Rosenberg scale 0,814 and for general questions 0,754, which

means that we can talk about a high reliability of both scales and general questions and therefore of the high reliability of the collected data.

2.2 SAMPLE

We used a simple random pattern. According to the size of the population of people aged 65 years and above, we chose, according to regions, proportionate stratified samples (sample sizes in strata are proportional to the size of the stratum). For the accuracy of the sample we have chosen a confidence interval ($\pm 3\%$). Such a confidence interval means that if 70 % of the respondents answer a certain question in the affirmative, we can expect that the result of the entire studied population will lie with the reliability of 95 % ($\alpha=0,05$) between 67 % and 73 %.

In our research we included the sample of 1064 older adults, 532 living in the home environment (urban or rural environment) and 532 in the social care institutions/homes for elderly (public or private institutions with concession) in each statistical region in Slovenia. The number of correctly completed survey questionnaires was 656, which means that the realization of the sample was 61,6 %. The realization of the sample was better in home environment 57,9 % (380 from 532), which indicates better health status of older adults in the home environment. The share of older adults who have correctly and completely completed the questionnaire in social care institutions represented 42,1 % (276 from 532) of all surveyed people in the population. The research included 71,6 % of women and 28,4 % of men. 46,0 % of the respondents were widowed and 37,5 % married. 33,9 % of the respondents had secondary (high school) education and 22,3 % vocational education. The average age of the respondents was 78,2 (standard deviation/SD=8,0) years, and their average monthly income was 722 (SD=293) EUR. Some respondents did not want to state the amount of their monthly income.

2.3 DATA COLLECTION

Data were collected in ten statistical regions across Slovenia. The procedure of data collection took place in domestic environment (in the homes of old people, at the meetings in local communities, in day activity centers, at social gatherings of retired people) and in 21 social care institu-

tions/homes for elderly. 43 interviewers were involved in the process of data collection. In order to complete the questionnaire, in the home environment old people needed 45 to 60 minutes for the task, whereas in social care institutions they needed up to 120 minutes to complete the questionnaire. Data collection took place from June 1st, 2014, until September 30th, 2015.

2.4 DATA ANALYSIS

In order to be able to show the desired influences or interconnections between social factors and life satisfaction we used the advanced statistical methods for the analysis of causal effects and conditional associations, that is the so called propensity score methods /22/. Propensity score methods are intended for association or causal effect statistical analysis of balanced study design, and enable the comparison of two statistically comparable groups. Our aim was to show as reliable estimates of associations as possible, which are contingent on the variables and used to balance the data/study plan.

Missing values: Prior to conducting a *propensity score study* we had to complete our databases, which included the missing values for respective variables for certain studied units. Variables that had more than 10 % of missing values were excluded from the analysis. The majority of the variables had, however, less than 5 % of missing values. The missing values were inputted by using *chained equations*, which use the linear regression for continuous variables, logistical regression for dummy variables and polynomial regression for discrete variables with more than two levels. To carry this out we used the package R of MICE /23/.

Spiritual factor was analyzed according to the set. The set was formed according to the advisability of combining variables (according to the area or the measuring instrument of respective variable). For the above mentioned set we created an index (self-image and spirituality). For self-esteem no index was created, as we used the pre-existing methodology (the Rosenberg scale).

For easier understanding, hereinafter each set of spiritual factor will be called an index. The spiritual factor was analyzed on the basis of two indexes.

The formation of indexes (IK): each formed index encompasses several variables. At first, all the var-

ables except dummy variables were transformed into the scale from 0-1 (whereby the minimal value is 0 and the maximal value is 1). The scale 0-1 was created in a way that each value within the respective variable was divided by its maximum value. This was followed by calculating the average value of all the variables, included in each respective index. For each in this way calculated federal index, we created a dummy variable. The division into 0 and 1 was done on the basis of meridian value of each respective index. To the studied units, whose index value was greater than or equal to the meridian index, a high level of the index was allocated. To the units, whose index value was smaller than the meridian index, a low level of index was allocated. **A high level of the index** represents better conditions or a better way of life, whereas a low level of index represents worse conditions or a worse way of life of the studied population. For instance, the studied unit, which in all sets of factors achieved a high level of the index, has higher self-esteem, experiences a greater meaning of life and perhaps even meditates and prays. The influence of the spiritual factor on life satisfaction of old people was studied by examining the difference in satisfaction regarding the spiritual factor among those with a high level of the index, and those with a low level of the index. On the basis of these findings we have in the continuation of our research tried to establish the connection between the spiritual factor and life satisfaction.

Methodology of the analysis: since this is a comparative study of the data that have not been collected on the basis of a completely randomized design, but with a survey, we first balanced the study plan so that the group of those with a high level of the index is comparable to the group of people with a low level of the index. To carry out this process, we used a propensity score /24/, which is a balancing score and methods of matching /25/, /26/. The propensity score was estimated on the basis of the observed covariates, which were selected based on the logicity with regard to the studied data and the objective of the analysis (influence of factors on life satisfaction). The objective was that the models for assessing the propensity score in all comparability studies would be the same. This means that all the comparability studies will be made on the study plan which is balanced based on the same covariates. Selected observed covariates are the following: gender, education, location of residence

and age. The propensity score was estimated by using logistic regression where we used the following model:

$$\text{logit}(IK) = \beta_0 + \beta_1 \text{gender} + \beta_2 \text{education} * \text{location} + \beta_3 \text{age} * \text{gender}$$

Here IK represents each index within each individual studied factor. For the criterion of model specification we used the balance of observed covariates. The selected model enabled us to balance observed covariates between units that reach the high and low levels of each index.

Imbalance: Some units have the values of variables, on the basis of which the study plan is balanced, lying outside the acceptable values. Those were eliminated by the process of matching. **Matching** was made by the so called *nearest neighbour algorithm*, whereby each unit with a high index level got its statistically comparable partner from the group with a low index level (1:1 matching). After the end of the matching process, the differences in life satisfaction between the respondents with a high index level and those with a low index level were evaluated on **matched data** in the following ways:

1. We wanted to establish whether there exists a statistically characteristic difference in life satisfaction between the two compared groups (high/low level of index). The difference was examined by Welch's t-test. Welch's t-test is used for comparison of the average value of two samples and examines the following hypotheses:

Ho: The difference in average value of life satisfaction between those with high index level (\bar{X}_V) and those with low index level (\bar{X}_N) equals zero.

$$H1: \bar{X}_V - \bar{X}_N \neq 0$$

2. The connection of respective indexes with life satisfaction was estimated by means of simple linear regression:

$$\text{Satisfaction with life} = \beta_0 + \beta_1 IK + \varepsilon$$

In this way the estimates of conditional associations between the selected indexes and life satisfaction were acquired.

3. The connection between the spiritual factor and life satisfaction was examined by means of variance analysis. The sum of the squares of each respective index tells us how much variation within the model can be attributed to the relationship between life satisfaction and the respective index. The higher this value, the more closely linked are life satisfaction and the respective index. In doing so, we were especially interested in the relationship between the sum of the squares for respective indexes and the total sum of squares (sum of the squares for respective index + the sum of squared residuals). This relationship is shown by multiple R-squared. With our analysis we wished to establish how strongly the spiritual factor is linked to life satisfaction in the old age.

3 RESULTS

3.1 SELF-ESTEEM

Table 1: Welch's t-test of self-esteem index

SELF-ESTEEM	95% confidence interval of		p-value	Maintained n (effective n)	
	\bar{X}_V	\bar{X}_N			the difference between \bar{X}_V and \bar{X}_N
Welch's t-test of the comparison of the two samples	25.75	17.75	[2.614, 13.386]	0.007	2.44 % n=16

Legend: \bar{X}_V - high index, \bar{X}_N - low index, p - statistical characteristics, n - number

From the Table 1 it can be seen, that the effective sample which was used in the analysis of this index amounted to 16, which is 2.44 % of the entire sample. From the Table 1 it can also be seen that there is a 95 % chance that the difference between the two groups will be within the interval [2.614, 13.386].

Welch's t-test of the comparison of a matched sample among individuals with high and low self-esteem indexes estimates, that there is a statistically significant difference between the two groups (Table 1), whereby it is necessary to point out, that the value of statistical characteristics was $p=0.007$, and the value of the effective sample was $n=16$, which means that in the entire sample there were only 8 people who were not satisfied with their lives in the old age. As it can be seen from the Table 1, those who have a high self-esteem index $\bar{X}_V = 25.75$ are more satisfied with their lives than those with a low self-esteem index $\bar{X}_N = 17.75$. There is a statistically significant difference between both groups. On one hand we have a group of old people who are highly satisfied with their lives (range 25-29 according to SWLS), and a group of old people who are slightly below average as regards life satisfaction. (range 15-19 according to SWLS).

The estimate of the conditional association shows, that there exists a positive connection between self-esteem and life-satisfaction (Table 2). If the self-esteem of an old person is increased, whereas all of the other factors remain the same, the individual's life satisfaction increases.

Table 2: The estimate of the conditional association (connection) between self-esteem and life satisfaction

	Estimated value	Standard error	p - value	Maintained n (effective n)
Self-esteem	0.275	0.075	0.003	2.44% n=16

Legend: p - statistical characteristics, n - number

3.2 SELF-IMAGE AND SPIRITUALITY

Welch's t-test of the comparison of a matched sample among individuals with high and low self-image and spirituality indexes estimates that there

is a statistically significant difference between the two groups (Table 3). From the table we can see that those who have a high self-image and spirituality index (\bar{X}_V) are more satisfied with their lives than those with a low self-image and spirituality

index (\bar{X}_N). Individuals with a high self-image and spirituality index achieve according to the Diener's Satisfaction with life Scale on average a high level of satisfaction ($\bar{X}_v = 25.051$). The individuals with a

low self-image and spirituality index on the other hand achieve an average level of life satisfaction ($\bar{X}_N = 20.043$).

Table 3: Welch's t-test of self-image and spirituality index

SELF-IMAGE AND SPIRITUALITY	\bar{X}_V	\bar{X}_N	95% confidence interval of the difference between \bar{X}_V and \bar{X}_N	p-value	Maintained n (effective n)
Welch's t-test of the comparison of the two samples	25.051	20.043	[3.734, 6.280]	0.000	42.10% n=276

Legend: \bar{X}_v – high index, \bar{X}_N – low index, p – statistical characteristics, n – number

From the Table 3 it can be seen, that there is a 95 % chance that the difference between the two groups will be within the interval [3.734, 6.280]. The maintained sample which was used in the analysis of this index was 276 (42.10 %).

The estimate of the conditional association (Table 4) completes the results of the t-test and estimates

the positive connection between life satisfaction and self-image and spirituality. This means that when self-image and spirituality of an individual improve, whereas all the other factors remain unchanged, the individual's life satisfaction improves.

Table 4: The estimate of conditional association (connection) between self-image and spirituality and life satisfaction

	Estimated value	Standard error	p – value	Maintained n (effective n)
Self-image and spirituality	30.289	3.129	0.000	42.10 % n=276

Legend: p – statistical characteristics, n – number

3.3 COMPARATIVE ANALYSIS OF MULTIPLE R-SQUARED

The purpose of the comparative analysis of multiple R-squared is to show the strength of connection that respective indexes have with life satisfaction.

The estimates of multiple R-squared stem from the variance analysis, which was done on harmonized

Table 5: Multiple R-squared for respective indexes

data, whereby life satisfaction was the dependent variable, and the respective indexes were independent variables. Table 5 presents the values of multiple R squared for respective indexes, degrees of statistical characteristics and the size of the harmonized sample (maintained/effective sample) on the basis of which the variance analysis was made.

	Multiple R-squared	Maintained n (Effective n)	p - value
SPIRITUAL FACTORS			
Self-esteem	0.488	2.44 %	0.003

Self-image and spirituality	0.255	n=16 42.10 % n=276	0.000
-----------------------------	-------	--------------------------	-------

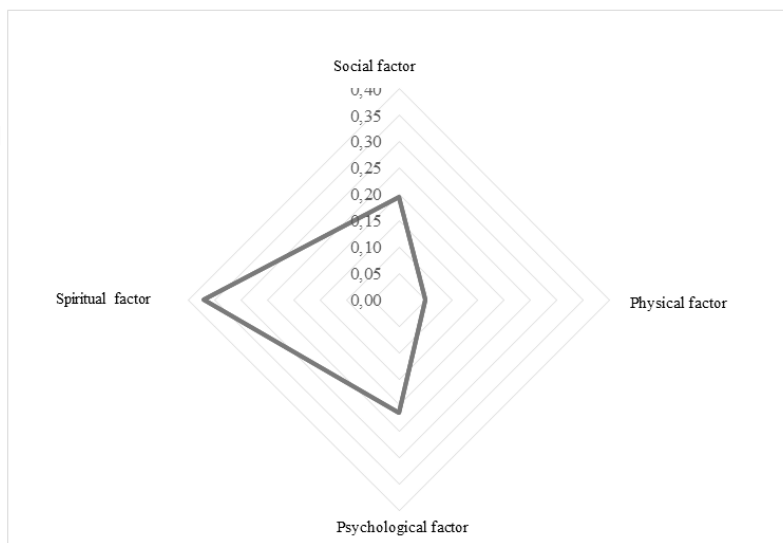
Legend: p – statistical characteristics, n – number

From the Table 5 the high value of multiple R-squared for self-esteem index can be seen, despite the relatively low effective sample. This index is built with the help of variables (questions), which are methodologically accomplished (Rosenberg), and at the same time supported by the elaborate methodology of their calculation. The self-esteem index, as well as the self-image and spirituality index, is closely connected to life satisfaction. The highest average value of multiple R-squared was

calculated for the spiritual factor ($R^2=0.37$), which means, that the spiritual factor is the factor that is most closely linked to life satisfaction, and as such the most important factor for the studied population.

We confirm the hypothesis that the spiritual factor is linked to life satisfaction in the old age. Among the holistic factors studied in the research, the spiritual factor is the one which is most closely linked to life satisfaction in the old age (Figure 1).

Figure 1: Strength of connection between life satisfaction and respective holistic factors



4 DISCUSSION

With our research we wished to establish the connection between the spiritual factor and life satisfaction in old age. We established that both indexes – self-esteem and self-image as well as spirituality are very closely linked to life satisfaction. Starc and Zabukovec /27/ have in an expansive Slovenian research titled »Staranje v Sloveniji« (in English: Ageing in Slovenia) established that two thirds of inhabitants, aged 50 years and above, are satisfied with their lives. Unfulfilled life plans do not necessarily imply the dissatisfaction with life.

Cummuns et al. /28/ have in a national research in Australia researched the satisfaction with personal life and satisfaction with living in Australia. They established that people living in rural areas were more satisfied with their personal lives than people living in urban areas, yet people living in rural areas were less satisfied with living in Australia. The researchers were surprised by the result, that women are more satisfied with their lives than men. Also D. Železnik /29/ notes that women are more satisfied with their lives than men. Despite of the fact that Stegmüller and Bakračević Vukman /30/ do not note any statistically important differences between men and women in regard to life

satisfaction, we can from the data conclude that women tend to evaluate their life satisfaction more highly. The authors state, that the individuals with higher levels of education evaluate life satisfaction higher than less educated ones, and at the same time experience negative emotions less often. Life satisfaction is not statistically connected to the marital status. They note, however, that single and married people are more satisfied with their lives than people living in extra-marital relationships. Fidecki et al. /31/, on the other hand, note that married older people are more satisfied with their lives than single old people.

The research by the authors Albert, Labs and Trommsdorff /32/, conducted among older women in Germany, has shown that the life satisfaction of women, who live with a partner, is strongly influenced by their family and family life. On the other hand the life satisfaction of women, who do not have a partner, is influenced by their friendships and socio-economic position. Samek Ladovici et al. /33/ state, that in addition to a higher risk of poverty and poorer self-assessment of their medical condition, older women who live alone are less satisfied with the quality of their lives than other women. Hlebec /34/ notes, than more women than men are widowed, that their education levels are lower, and that they live in lower income households.

A decline in life satisfaction is according to Gaber /35/ connected to unfulfilled expectations and a poor self-image as well as to the loss of social roles in the old age. Life satisfaction depends on the correct life orientation. She states that the general self-image fluctuates with age. The self-image is the highest among people aged between 65 and 70 years, whereas it is the lowest among people aged between 71 and 75 years. In people aged 85 years and above, the general self-image improves again. When talking about the physical self-image, the picture was different than with the general self-image. Among people aged 85 years and above, the physical self-image was the lowest, which shows that the chronological age influences the physical self-image.

D. Železnik /29/ claims, that satisfaction with one's life is also influenced by the self-esteem of an individual. U. Železnik /36/ notes that older women have higher self-esteem than older men. In addition to that, he reports about the lower self-esteem in old people who are engaged in housework and farming. The results of the research, conducted by

Bodner, Palgi and Kaveh /37/ show, that the self-esteem is higher in younger old people (aged 65-79 years) in comparison with older old people (80-93 years).

Mukherjee /38/ has researched the connection between spirituality and life satisfaction among 100 old people in home environment and 100 old people in institutional environment. The results have shown that spirituality encompasses a system of beliefs, which included love, compassion, and respect for life. It is about the relationships with ourselves, the others, and about a way of living. Rahimi, Anoosheh, Ahmadi and Foroughan, M. /39/ have among 21 healthy old people, with whom they have carried out semi structured interviews, established that spirituality is important for each individual and that it influences their health. It is a basic element that helps the old people adapt to everyday life situations.

A strong connection between spirituality and mental health among the old people, who lived in the local community, has been established by Meisenholder and Chandler /40/ in their research. They have also established that the categories of the spiritual (prayer, faith, religion) have a stronger influence on mental health than the categories of physical health. Soriano et al. /41/ have conducted a predictive-correlational study among 200 randomly-selected community-dwelling and institutionalized older adults and found out, that the institutionalization in a nursing home positively affects spirituality and quality of life and that spirituality has direct positive effects on quality of life dimensions. Mok, F. Wong and D. Wong /42/ have conducted phenomenological interviews among 15 terminally ill Chinese patients and established that spirituality is integrated with the body and mind and is a multidimensional concept.

Also spirituality, well-being and hope have an important role in life satisfaction as has been observed among 120 cancer patients /43/. Velasco-Gonzales and Rioux /44/ wanted to identify predictors of the spiritual well-being of elderly people. 133 people aged 60-95 were included into research. They found out that neither health status nor age was found to be a significant predictor of spiritual well-being, but they could better understand the links with the concept of spiritual well-being.

Similar conclusions were drawn also by Tomás, Sancho, Galiana and Oliver /45/ among 224 community-dwelling Spanish elderly, namely, that the

spirituality is a key element when picturing successful aging.

An increase in self-esteem levels can be on the basis of the conducted research achieved in the following ways:

- A person should not experience old age with a sense of inferiority,
- A person should think positively and experience themselves in a positive way (positive evaluation of oneself),
- That a person has a positive opinion of themselves and is pleased with themselves (from which a better understanding with the others arises),
- That an old person recognizes his or her contribution to the society throughout their life (that they evaluate their achievements positively, in accordance with their standards and values) and
- That they feel useful also in the old age. The self-image of an individual and the development of human ability to perceive spirituality can be strengthened:
 - By enhancing (increasing) an individual's positive experiencing of oneself,
 - By learning to accept oneself together with all of one's positive as well as one's negative qualities,
 - By looking after one's mental health, which has an important impact on a person's positive self-image,
 - By striving for a positive attitude towards ageing, the inclusion of old people into social activities, so that they can stay active and independent for as long as possible,
 - By developing a positive physical, academic, social, emotional and religious self-image,
 - By the strengthening of one's spiritual abilities, as physical and mental abilities decline,
 - By taking into account the spiritual needs of old people,
 - With a broad understanding of spirituality, which refers to the improvement of cultural and existential aspects, at times when old people look for the answers to the questions of the origin and the meaning of their existence and awareness
 - By understanding spirituality as a connector of life and existence into a meaningful whole,
 - By expressing the spiritual needs - the needs for meditation and prayer.

Life satisfaction therefore refers to the general level of well-being of an individual /46/, which is related to the level of satisfying their needs, goals, expectations and standards, and depends on the physical health of an individual, their psychological state, their level of independence and their relationship with the environment. There exist many definitions of spirituality, and they differ from person to person, as each individual has their own view on life and the material world and their own sense of connection with the world. The spiritual factor is the centre of our lives. Each individual strives to achieve the harmony of the body, spirit and soul and to find a meaning in their existence and experiences. Despite of the fact that the sample is not representative, the results of the analysis can be generalized to the entire population of old people, as the analysis was done on balanced data. The spiritual factor is for old people the most important factor that influences their satisfaction with life. The latter is so important due to the self-esteem index, which is based on the Rosenberg methodologically elaborate construct, and that should be the reason for us to proceed with the exploring of the influence and the connection of the spiritual factor with life satisfaction in old people.

5 CONCLUSION

Each human being is a unique and unrepeatable whole in space and time. With our research we have established that an individual as a whole is to the greatest extent influenced by the spiritual factor, which enables a person to lead a fulfilled and quality life also in old age. In order for this to happen, self-esteem and positive self-image as well as spirituality are important. We have to be aware of the fact that ageing and old age are experienced in a unique manner by each and every one of us; therefore it is necessary to give appropriate attention to life satisfaction in the old age in all its range of elements, causes and consequences. This paper with its originality importantly contributes to the understanding of life satisfaction in old age and to the importance of the spiritual factor inside holistic treatment of the elderly adults in their old age. According to the opinion of Kaučič, Filej and Ovsenik /47/ it is necessary to find balance between problems and opportunities, occurring in an aging population and could be challenges of societies today for tomorrow.

Limitation of Research

The shortcomings of our research can be seen in the fact that no triangulation (review from different angles) was carried out, due to the size and the complexity of our quantitative research, which was conducted in ten statistical regions. In respect to the research design we did not choose the constructivist approach (qualitative paradigm), which would offer us additional possibilities to discover new knowledge and search for the in-depth answers to the research questions. In future we propose the use of qualitative research method, where we will not be interested in the opinion of the majority, but of the individual, as each human being has in the opinion of Zurc /48/ their own truth and their own construct of the world.

The conducted research has its limitations in the chosen methodology and the size of the sample. The results are the result of analysis, which was conducted on a balanced study plan; therefore the results can be generalized on the population of older adults. In the future the attention will have to be paid to the study of elements of respective indexes and their influence upon life satisfaction.

References

/1/ Starc, M. and Zabukovec, M. (2013), *Zadovoljstvo s svojim življenjem v luči življenjskih sprememb. Kakovostna starost*, Vol. 16, No. 1, p. 3 - 19.

/2/ Ramovš, J. and Lipar, T. (2013), *Zadovoljstvo s svojim življenjem. Kakovostna starost*, Vol. 16, No. 1, p. 48 - 49.

/3/ Kompare, A. (2006), *Uvod v psihologijo*. Ljubljana: DZS. Available at: <http://tusmo.si/clanki/samopomoc/tvoja-samopodoba/>.

/4/ Arip, MASM., Saad, FM., Rahman, AMA., Salim, SSSS. and Bistaman, MN. (2013), Translation, validity and reliability of Multidimensional Self-Concept Scale (MSCS) questionnaire among Malaysian teenagers. *Procedia – Social and Behavioral Sciences*, Vol. 84, p. 1455 - 1463. Available at: <http://dx.doi.org/10.1016/j.sbspro.2013.06.773>

/5/ Zaletel, M. (2011), Identiteta starejših telesno dejavnih oseb. In: Rugelj, D. and Sevšek, F. (Eds). *Zbornik predavanj*. Ljubljana: Zdravstvena fakulteta, p. 9-20. Available at: <http://www2.zf.uni-lj.si/ri/publikacije/staranje2011/3.pdf>.

/6/ Pinquart, M. (2012), Self-esteem of children and adolescents with chronic illness: a meta-analysis. *Child: care, health and development*, Vol. 39, No. 2, p. 153 - 161.

/7/ Babšek, B. (2009), *Osnove psihologije: skrivnosti sveta v nas*. Celje: Celjska Mohorjeva družba: Društvo Mohorjeva družba.

/8/ Kristančič, A. (2005), *Nova podoba staranja – siva revolucija*. Ljubljana: AA Inserco.

/9/ Musek, J. (2005), *Psihološke in kognitivne študije osebnosti*. Ljubljana: Znanstveni inštitut Filozofske fakultete.

/10/ Payne, S. and Walker, J. (2002), *Psihologija v zdravstveni negi*. Ljubljana: Educy.

/11/ Escobar, CRL. and de Guzman, AB. (2014), Effects of third age learning programs on the life satisfaction, self-esteem, and depression level among a select group of community dwelling Filipino elderly. *Educational Gerontology*. Vol. 40, No. 2, p. 77 - 90. Available at: <http://dx.doi.org/10.1080/03601277.2012.701157>.

/12/ Halit, AH. (2014), Self esteem and its relation to depression among the elderly. *International Journal of Business and Social Science*, Vol. 5, No. 3, p. 266 - 273.

/13/ Aggar, C., Ronaldson, S. and Cameron, ID. (2011), Self-esteem in carers of frail older people: resentment predicts anxiety and depression. *Aging & Mental Health*, Vol. 15, No. 6, p. 671 - 678.

/14/ Kvas, A. and Seljak, J. (2004), *Slovenske medicinske sestre na poti v postmoderno*. Ljubljana: Društvo medicinskih sester in zdravstvenih tehnikov.

/15/ Kopal, D. (2000), *Temeljni vidiki samopodobe*. Ljubljana: Pedagoški inštitut.

/16/ Ramovš, J. and Ramovš, M. (2013), Duhovne potrebe in zmožnosti v luči staranja in sožitja. In: Ramovš, J. (Ed.) *Staranje v Sloveniji*. Ljubljana: Inštitut Antona Trstenjaka za gerontologijo in medgeneracijsko sožitje, p. 443 - 474.

/17/ Filej, B. and Kaučič, BM. (2015), Koncepti metaparadigme v holistični obravnavi. In: Kaučič, BM. et al. (Eds.) *Sodelovanje strokovnjakov v paliativnem timu za celostno obravnavo pacientov in svojcev : zbornik predavanj z recenzijo = Participation of experts in the palliative team for holistic treatment of patients and relatives : proceedings of lectures with peer review*. Celje: Visoka zdravstvena šola: = College of Nursing, p. 12 - 20.

/18/ Periček Krapež, V. (2011), Se duhovnost pojavi kar sama od sebe? Available at: <http://www.karmaplus.net/index2>.

/19/ Tjale, AA. and Bruce, B. (2007), A concept analysis of holistic nursing care in paediatric nursing. *Curationis*, Vol. 30, No. 4, p. 45 - 52.

/20/ Rodica, B. (2012), *Raziskovalno delo v zdravstveni negi (učno gradivo)*. Novo mesto: Visoka šola za zdravstvo.

/21/ Diener, E., Emmons, RA., Lassen, RJ. and Griffin, S. (1985), The Satisfaction With Life Scale. *Journal of Personality Assessment*. Vol. 49, No. 1, p. 71 - 75. Available at:

- https://internal.psychology.illinois.edu/~ediener/Documents/Diener-Emmons-Larsen-Griffin_1985.pdf.
- /22/Rubin, DB. (2006), *Matched sampling for Causal Effects*. New York: Cambridge University Press.
- /23/Van Buuren, S. and Groothuis-Oudshoorn, K. (2011), *Mice: Multivariate Imputation by Chained Equations*. *Journal of Statistical Software*, Vol. 45, No. 3, p. 1 - 67. Available at: <https://www.jstatsoft.org/article/view/v045i03/v45i03.pdf>.
- /24/Rosenbaum, PR. and Rubin, DB. (1983), *The Central Role of the Propensity Score in Observational studies for Causal effects*. *Biometrika*, Vol. 70, No. 1, p. 41 - 55. Available at: http://www.stat.cmu.edu/~ryantibs/journalclub/rosebaum_1983.pdf.
- /25/Chapin, F. (1947), *Experimental Designs in Sociological Research*. New York: Harper.
- /26/Greenwood, E. (1945), *Experimental sociology, a study in method*. New York: King's Crown Press.
- /27/Starc, M. and; Zabukovec, M. (2013), *Zadovoljstvo s svojim življenjem v luči življenjskih sprememb*. In: Ramovš, J. (Ed.) *Staranje v Sloveniji*. Ljubljana: Inštitut Antona Trstenjaka za gerontologijo in medgeneracijsko sožitje, p. 99 - 118.
- /28/Cummuns, RA., Eckersley, R., Pallant, J., Van Vugt, J. and Misajon R. (2003), *Developing a national index of subjective wellbeing: The Australian Unity wellbeing index*. *Social Indicators Research*. Vol. 64, No. 2, p. 159 - 190.
- /29/Železnik, D. (2012), *Stališča starejših v Pomurju o zadovoljstvu z življenjem in o samospoštovanju*. *Kakovostna starost*. Vol. 15, No. 4, p. 28 - 40.
- /30/Stegmuller, N. and; Bakračević Vukman, K. (2012), *Zadovoljstvo z življenjem v povezavi s pozitivnim in negativnim čustovanjem v srednji in pozni odraslosti*. *Raziskava na slovenskem vzorcu odraslih*. *Anthropos*, Vol. 1 - 2, p. 31 - 54. Available at: http://www.anthropos.si/anthropos/2012/1_2/02_stegmuller_vukman.pdf.
- /31/Fidecki, W., Widomska, E., Wysokiński, M., Wrońska, I., Sienkiewicz, Z., Kulina, D. and Kościółek, A. (2015), *Selected quality of life elements in elderly inhabitants of Lublin*. *Gerontologia Polska*, Vol. 4, p. 165 - 169.
- /32/Albert, I., Labs, K. and Trommsdorff, G. (2010), *Are older adult German women satisfied with their lives? On the role of life domains, partnership status, and self construal*. *The Journal of Gerontopsychology and Geriatric Psychiatry*, Vol. 23, No. 1, p. 39 - 49.
- /33/Samek Lodovici, M., Patrizio, M., Pesce, F. and Roletto, E. (2015), *Elderly women living alone: an update of their living conditions*. Available at: [http://www.europarl.europa.eu/RegData/etudes/STUD/2015/519219/IPOL_STU\(2015\)519219_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/519219/IPOL_STU(2015)519219_EN.pdf).
- /34/Hlebec, V. (2004), *Socialna opora starostnikov v perspektivi spolov*. *Teorija in praksa*, Vol. 41, No. 5-6, p. 992 - 1007. Available at: <http://dk.fdv.uni-lj.si/db/pdfs/tip20045-6Hlebec.pdf>.
- /35/Gaber, L. (2015). *Vpliv samopodobe starih ljudi na zadovoljstvo z življenjem*. (Diplomsko delo). Alma Mater Europaea –ECM.
- /36/Železnik, U. (2012), *Samopodoba in samospoštovanje čezmerno prehranjenih slušateljev v šoli zdravega hujšanja*. (Magistrsko delo). Maribor: Univerza v Mariboru, Fakulteta za zdravstvene vede. Available at: <https://dk.um.si/Dokument.php?id=48711>.
- /37/Bodner, E., Palgi, Y. and Kaveh, D. (2013), *Does the relationship between affect complexity and self-esteem differ in young-old and old-old participants?* *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, Vol. 68, No. 5, p. 665 - 673.
- /38/Mukherjee, SB. (2016), *Spirituality and Religion: Elderly's Perception and Understanding*. *Indian Journal of Gerontology*, Vol. 30, No. 3, p. 336 - 354.
- /39/Rahimi, A., Anoosheh, M., Ahmadi, F. and Foroughan, M. (2013), *Exploring spirituality in Iranian healthy elderly people: A qualitative content analysis*. *Iranian Journal of Nursing & Midwifery Reserach*, Vol. 18, No. 2, p. 163 - 170. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3748574/?report=classic>.
- /40/Meisenhelder, JB. and Chandler, EN (2002), *Spirituality and Health Outcomes in the Elderly*. *Journal of Religion & Health*, Vol. 41, No. 3, p. 243 - 252.
- /41/Soriano, CAF., Sarmiento, WD., Songco, FJG., Macindo, JRB. and Conde, AR. (2016), *Socio-demographics, spirituality and quality of life among community-dwelling and institutionalized older adults: A structural equation model*. *Archives of Gerontology and Geriatrics*. Vol. 66, p. 176 - 182. doi: 10.1016/j.archger.2016.05.011.
- /42/Mok, E., Wong, F. and Wong, D. (2010), *The meaning of spirituality and spiritual care among the Hong Kong Chinese terminally ill*. *Journal of Advanced Nursing*. Vol. 66, No. 2, p. 360 - 370. doi: 10.1111/j.1365-2648.2009.05193.x
- /43/Jafari, E., Najafi, M., Sohrabi, F., Deshiri, GR., Soleymani, E. and Heshmati, R. (2010), *Life satisfaction, spirituality well-being and hope in cancer patients*. *Procedia – Social and Behavioral Sciences*. No. 5, p. 1362 - 1366. Available at: <http://dx.doi.org/10.1016/j.sbspro.2010.07.288>.
- /44/Velasco-Gonzales, L. and Rioux, L. (2014), *The spiritual Well-Being of Elderly People: A Study of a French Sample*. *Journal of Religion & Health*. Vol. 53, No. 4, p. 1123 - 1137.
- /45/Tomás, J., Sancho, P., Galiana, L. and Oliver, AA. (2016), *Double Test on the Importance of Spirituality, the Forgotten Factor in Successful Aging*. *Social Indicators Research*, Vol. 127, No. 3, p. 1377 - 1389.
- /46/Fahey, T., Nolan, B. and Whelan, CT. (2003). *Monitoring quality of life in Europe*. Dublin: Economic and Social Research Institute, Available at:

<http://www.eurofound.europa.eu/publications/htmlfiles/ef02108.htm>

/47/Kaučič, BM., Filej, B. and Ovsenik, M. Ageing-a problem or a challenge for modern society. In: Kaučič, BM., Filej, B., Dobrowolska, B., Kane, R. and Boronczyk, B. (Eds.) Multicultural society and aging

– challenges for Nursing in Europe. Celje: College of Nursing, p. 58 - 65.

/48/Zurc, J. (2016), Kvalitativna raziskovalna paradigma v raziskovanju (učno gradivo). Celje: Visoka zdravstvena šola v Celju.