The Influence of Social Factors on Life Satisfaction in Old Age

Boris Miha Kaučič*
College of Nursing in Celje, Mariborska cesta 7, 3000 Celje, Slovenia
Alma Mater Europaea – ECM, Slovenska 17, 2000 Maribor, Slovenia
Faculty of Organisation Studies Novo mesto, Novi trg 5, 8000 Novo mesto, Slovenia
miha.kaucic@vzsce.si; miha.kaucic@almamater.si

Bojana Filej*
College of Nursing in Celje, Mariborska cesta 7, 3000 Celje, Slovenia
Alma Mater Europaea – ECM, Slovenska 17, 2000 Maribor, Slovenia
bojana.filej@gmail.com

Marija Ovsenik*
Faculty of Organisation Studies Novo mesto, Novi trg 5, 8000 Novo mesto, Slovenia
Alma Mater Europaea – ECM, Slovenska 17, 2000 Maribor, Slovenia
mara.ovsenik@gmail.com

Abstract:
Research question (RQ): What is the connection between social factors and life satisfaction in old age?
Purpose: The purpose of this research was to establish the influence of social factors on life satisfaction in old age.
Method: The quantitative research method was used, a causal non-experimental method. As sampling data technique we used the technique of a survey questionnaire in ten statistical regions. For the analysis of causal effects and conditional associations we used the advanced statistical propensity score methods (Rubin, 2006). From the statistical set a simple random sample was chosen, we decided on proportionate stratification. For measuring life satisfaction we used Satisfaction with Life Scale (Diener)
Results: Closely connected to life satisfaction in old age is the living conditions index (housing conditions, environment, financial situation, safety), whereas the lifestyle index (physical activity, nutrition, smoking, alcohol consumption) is less closely connected.
Discussion: Life satisfaction in old age is importantly influenced by social factors – suitable living conditions and less influenced by a healthy lifestyle, both of which allow for a quality life also in old age.
Society: The research has an important influence on the society, as too little attention is being devoted to the phenomenon of ageing. By alerting the public we wish to contribute towards the detabuisation of ageing and ageism. For the stable healthcare system it is important that older adults remain healthy, independent and satisfied.
Originality: The originality of the research is in the studying of social factor in the holistic model of satisfaction with life in the old age, which also includes physical, psychological and spiritual factors.
Limitations/further research: The conducted research has its limitations in the chosen methodology and sample size. The results are the result of analysis, which was made on well-balanced study plan, therefore the results can be generalized to the population of older adults (65 years and above). In the future it will be necessary to pay attention to the study of elements of respective social factors indexes, and their influence on life satisfaction.

Key words: social factors, living conditions, lifestyle, old people, home environment, social care institution.

* Korespondenčni avtor / Correspondence author
1 Introduction

In Slovenia we face a number of phenomena, connected to the problematics of ageing, which require the development of new pathways in the planning of health care and the quality of life of older people (Kožuh Novak, 2006, pp. 12-13). All the reports of the Statistical Office of the Republic of Slovenia (SOURS) predict a marked ageing of Slovenian population also in the future. The population of the Member States of the EU-27 is according to the predictions going to age rapidly. The share of people, aged 65 years and above among general population is in EU-27 expected to increase from 17.1 % to 30.0 %; whereas the number of residents in this age group is from the year 2008 to the year 2060 expected to increase from 84.6 million to 151.5 million. In Slovenia, however, according to medium variant population projections EUROPOP2008 the share of people aged 65+ among general population is expected to increase for 33.4 %, between the years 2008 and 2060 (SOURS: Prebivalstvo Slovenije danes in jutri 2008-2060: projekcije prebivalstva EUROPOP 2008 za Slovenijo, 2009, str. 27- SOURS: Slovenian population today and tomorrow 2008-2060: population projections EUROPOP 2008 for Slovenia, 2009, p. 27).

Jakoš (2009, pp. 22-24) states, that the present demographical picture of Slovenia is a consequence of more than one hundred years long demographic development of three demographic factors: mortality, fertility and migrations. Among the factors that influence the future demographic development the most stable factor is as a rule mortality, where we can expect the number to rise from the present 18.000-19.000 deaths to 30.000 deaths. The fertility, which represents the most important factor of demographic development, is also decreasing in Slovenia. From the projections until the year 2027 it is evident, that the number of women in the most reproductive age is going to decrease, which is the logical consequence of lower and lower number of births since the year 1980. In case we wished to maintain the present annual birth rate, the fertility should be increased by a quarter, which is according to the opinion of the author highly unlikely. The author also draws attention to the decline in young people in the population structure, in both absolute and relative terms, which has as a consequence a shortage in labour force (p. 31).

The World Health Organization (WHO) has prepared a strategy and action plan for healthy ageing in Europe for the period between 2012–2020. The vision of this strategy is based on old age friendly European region, where ageing is considered as an opportunity rather than as a burden for society. The vision is based on the premise, that old people are capable of keeping their health, that they are functionally able and that they are feeling well, that they live a decent life, free from discrimination and with adequate financial means in the environment that supports them, offers them safety, enables them an active life, social inclusion and access to suitable high-quality health and social services. Old age friendly European region according to WHO helps old people to reach their old age in better health so that they can live actively according to their different roles, with an emphasis on employment

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The quality of life of old people has been the subject of research for a number of years. The quality of life is a subjective, multi-layered construct, which can be defined and assessed in a number of ways. The quality of life is becoming a central social value and a very complex field of study (Filej & Žvanut, 2015, p. 20). Lah, Pahor and Hlebec (2008, p. 88) state that synonyms for the quality of life of older people, terms such as »successful ageing«, »good ageing« and »positive ageing« are frequently used.

Through the literature and data review it can be seen, that the European countries and among them Slovenia are facing demographic changes and a lower birth rate. The life expectancy of Europeans is increasing and the ageing is becoming an important phenomenon in the modern society, in which we are afraid of ageing, especially due to the lack of satisfaction with life. We can expect that the quality of life of old people will in future deteriorate even further. In the next years we face the comprehensive overhaul of the health care system and the pension system, which will, in the opinion of many experts, bring about the reduction in the rights of the users. The need for greater inclusion of old people in the society, the ensuring of the provision for a quality, healthy and active old age requires activities and measures, which are going to represent an innovation in the care for old people and their quality of life.

The projections indicate, that the number of old people (aged 65 years and above), is going to further increase and therefore it is important to pay special attention to the ensuring of wellbeing in the old age, which is an important element of the quality of life. In the field of health and social activity we establish that too little attention is being paid to the comprehensive, holistic treatment of the old person, even though the research shows that the physical, psychological, social and spiritual factors are importantly intertwined, and therefore studying their influence on satisfaction with life in the old age is of utmost importance.

The research problem that we examine in this paper is highly topical; as we wish that the people in old age feel well and are satisfied with their lives. We are of the opinion that the holistic model with the intertwining of all four factors (physical, psychological, social and spiritual) can represent the answer to the well-being of people in the old age and their satisfaction with their lives. In this paper we demonstrate the influence of social factors on life satisfaction in the old age. Living conditions, such as housing conditions, the environment, financial position and safety as well as lifestyle factors (physical activity, nutrition, smoking and alcohol consumption) have a great influence on the quality of life.

With the conducted research we wished to establish the influence of living conditions and lifestyle on life satisfaction in the old age. For this purpose we designed the following research purpose: to establish the connection between social factors and life satisfaction in the old age.
2 Theoretical framework

Musek (2005) states that life satisfaction is influenced by various domains of satisfaction, that is by the satisfaction with one's partner, marriage, friends, love, recreational activities etc. Positive affect involves positive emotions and emotional states such as joy, affection, pride, whereas negative affect involves negative ones such as anxiety, sadness, guilt, shame, anger, etc. (p. 119). Our assessment of subjective well-being is formed on the basis of our past experiences, present condition and also on our future expectations (p. 120).

Bond and Corner (2004, p. 4) state, that from the standpoint of critical perspective of social gerontology two key principles emerged. Firstly, the factors and criteria which define the good quality of life of elderly people and can be similarly applied also to the people belonging to other age groups. Secondly, the experience of being an old person in the modern society is defined by economic and social factors, as well as by biological and individual characteristics. The quality of life is in his opinion an individual experience, as every old person has their own basic expectations regarding life and their own perception of old age.

The quality of life is therefore a concept, which serves the recording and measuring the well-being of individuals and groups. Oparo et al. (2010; cited in Filej, Kröpfl, & Kaučič, 2015, p. 6) emphasize, that the concept of quality of life includes at least three wider domains, that is physical, mental and social.

A number of various researches have shown that an old person has quality a life when he experiences good interpersonal relationships, help and support; lives in a home or in neighbourhood that offers him satisfaction, a feeling of safety, and has available in the vicinity of the institution facilities, including transport. Some of the important elements of quality of life in the old age are the inclusion of older people in hobbies and free-time activities, as well as the engagement in social activities and preserving an active role in the community. For an older person it is also important that he or she is in good health, is mobile, and has sufficient financial means to meet the basic life needs and participates in the society (Lah, 2007, p. 20).

An important element in the concept of life quality is satisfaction, which is an important driving force in life and an important factor of an individual's personal stability as well as a multi-layered indicator of the quality of life and personal well-being (Starc & Zabukovec, 2013a, pp. 3-4). Ramovš and Lipar (2013, p. 49) are of the opinion, that the satisfaction with one's life is represented by an individual's wellbeing due to experiencing one's own life as in accordance with one's own needs and wishes. A satisfied person has a positive attitude towards one's own life.

Old people are a group, which is according to the income and material indicators a group more vulnerable than the rest of the population (Hlebec, Kavčič, Filipovič Hrast, Vezovnik, & Trbanc, 2010, p. 36). Poverty represents a socio structural problem, as life in poverty is specific and therefore also the ways of coping with it are specific. The latter depend on social
power, access to resources and on possibilities for a way out of poverty (Leskošek, 2012, pp. 22, 30). A higher degree of risk of poverty is present in older women (Filipovič Hrast & Hlebec, 2015, p. 99).

The quality of life and satisfaction with life in old age is strongly influenced by a healthy lifestyle. Hlebec, Kavčič, Filipovič Hrast, Vezovnik and Trbanc (2010) state, that also an old person can importantly contribute towards the maintenance of one's own health. Davies (2011) claims that with a change in lifestyle, such as for instance with healthy nutrition and physical activity, we can importantly promote healthy ageing and improve the quality of life of the elderly. (p. 43) Golob (2011) states, that healthy, balanced nutrition, regular and moderate physical activity, as well as one's connection with one's surroundings, less stress and maintaining one's mental health are the key to one's healthy and active old age. (p. 11) Healthy nutrition is according to the opinion of Bilban (2010) a basic prerequisite for the maintenance of an individual's health, well-being and for a quality life in the old age. In order for an old person to remain healthy, the nutritional status is of utmost importance. The eating regime of an old person and their nutritional status is importantly influenced by physiological, psychological, economic and social factors. (p. 40) Physical activity and eating habits are the key factors that enable the old people to remain physically and mentally healthy and protect themselves from the development of chronic diseases (Zurc, Hlastan-Ribič, & Skela-Savič, 2015, p. 9). Unpleasant emotions like concern, sadness, anxiety, restlessness, pain, hunger, thirst, heat, cold, tiredness, feelings of guilt, shame and fear, which can appear also in old age, are by many suppressed by alcohol consumption. All these emotions are, however, a sign that warns us that something is wrong. (Židanik, cited in Sabotin, 2015, p. 4) Excessive alcohol consumption in old age can also lead to alcohol addiction.

Equally harmful to the health as alcohol is tobacco smoke, which was confirmed by a number of researches, however, there is one important difference between the two. Whereas alcohol has a negative influence on the heath of the user, the tobacco smoke exerts a negative influence also on the health of non-smokers in the vicinity, and represents a health hazard for them, which is called passive smoking (Butala, 2006). It can be said, however, that also alcohol indirectly negatively influences the health of people in the social network of alcohol user. Kerčmar (2014, pp. 26-28) states that in families with alcoholics different forms of violence are present. Alcohol also negatively influences the children and their growing up. As a consequence of traumatic events in the family, people living with a person who excessively consummates alcohol are more susceptible to mental health problems. Čakš (2006) states that epidemiological studies have shown a whole array of problems, caused by passive smoking. The problems can thus show themselves as irritation of the eyes and the nose, an increased numbers of inflammations of the respiratory system, a dysfunction of the respiratory tract, angina pectoris, an increased risk for the coronary heart disease, and especially for cancer. According to the data by Koprivnikar (2006) men are more likely to smoke than women. The share of smokers is getting reduced with age. The smallest proportion of smokers is in the age group of 61 years and above.
We formulated the following research hypothesis: **Social factors influence life satisfaction in old age.**

Living conditions, such as housing conditions, environment, financial conditions and safety, as well as lifestyle conditions (physical activity, nutrition, smoking and alcohol consumption), have a considerable influence on the quality of life of old people. With our research we wanted to establish the influence of living conditions and lifestyle on the satisfaction of people with life in the old age. The indexes »living conditions« and »lifestyle« represent social factors.

### 3 Method

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 (Rodica, 2012, pp. 25-26).

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 (Diener, Emmons, Larsen, & Griffin, 1985, pp. 71-75), 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 study the living conditions index we formed 7 questions, and to study the lifestyle index 13 questions were formed. The questions could be answered by: 1-nothing, 2-a little, 3-a moderate amount, 4-well, 5-very well; 1-very dissatisfied, 2-dissatisfied, 3-neither satisfied nor dissatisfied, 4-satisfied, 5-very satisfied.

The social factors include two indexes: living conditions index and lifestyle index. **Living conditions** index includes data about housing conditions (*q23*), environment (*q9, q24, q25*),
financial state \((q12, q141)\) and safety \((q8)\). **Lifestyle** index includes the data on physical activity, nutrition, smoking and alcohol consumption \((q36-q48)\), whereby the scale of the questions that concern smoking and alcohol consumption was adjusted to those who smoke/consume alcohol daily in a way that lower values were ascribed to them in comparison with other people. Something similar was made with the question concerning the consumption of meat and dairy products, as the daily intake of those products is not recommended.

The reliability of SWLS scale and the general questions about old age and the quality of life were tested with Cronbach's coefficient alpha. For SWLS scale the coefficient was 0.848 and for general questions 0.728, which means that the scale and with it the collected data are highly reliable.

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 confidence interval \(\pm 3\%\). Such a trust interval means that if 70 \% of the respondents answer a certain question in the affirmative, we can expect that the result in the entire studied population will be with the reliability of 95 \% (alpha=0.05) between 67 \% and 73 \%.

In our research we included the sample of 1064 older adults, living in the home environment (urban or rural environment) or in the social care institutions (public or private institutions with concession) in each statistical region. 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 \%), which indicates better state of health of older adults in the home environment. The share of older adults who have correctly and completely completed the questionnaire in social care institution represented 42.1 \% of all surveyed people in the population.

Table 1 shows the demographic characteristics of the respondents.
Table 1. Demographic characteristics of respondents

<table>
<thead>
<tr>
<th>Demographic factor</th>
<th>n=656</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>186</td>
<td>28.4</td>
</tr>
<tr>
<td>Female</td>
<td>470</td>
<td>71.6</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>246</td>
<td>37.5</td>
</tr>
<tr>
<td>Single</td>
<td>48</td>
<td>7.3</td>
</tr>
<tr>
<td>Widowed</td>
<td>302</td>
<td>46.0</td>
</tr>
<tr>
<td>Divorced, separated</td>
<td>43</td>
<td>6.6</td>
</tr>
<tr>
<td>Non-marital partnerships</td>
<td>17</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary education</td>
<td>132</td>
<td>20.1</td>
</tr>
<tr>
<td>Vocational education</td>
<td>146</td>
<td>22.3</td>
</tr>
<tr>
<td>Secondary (high school) education</td>
<td>229</td>
<td>33.9</td>
</tr>
<tr>
<td>Higher education</td>
<td>97</td>
<td>14.8</td>
</tr>
<tr>
<td>University graduates and post-graduate degrees</td>
<td>52</td>
<td>7.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographic factor</th>
<th>AV±SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>78.2±8.0</td>
<td>65-98</td>
</tr>
<tr>
<td>The amount of monthly income (in EUR)</td>
<td>722±293</td>
<td>0-1800</td>
</tr>
</tbody>
</table>

n=number; AV=average value; SD=standard deviation

The majority of the respondents were female and widowed, 33.9 % of them have completed secondary (high school) education. The average age of the respondents was 78.2 (SD=8.0) years and their average monthly income was 722 (SD=293) EUR. Some of the respondents did not want to specify the amount of their monthly income.

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, day activity centres, at social gatherings of retired people) and in 21 social care institutions. 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.

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 (Rubin, 2006). 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.

Before carrying out the study, we obtained a permission of the Commission for Scientific Research of the Faculty of Organisational Studies in Novo mesto, where the Commission
assessed the ethical aspects of the research. The Commission for Scientific Research made the decision (Item no.: 130-014/ 2014 dated 21st March 2014) that the study and the measurement instrument take into account all ethical aspects of research and that they are appropriate for conducting the research. All respondents who were included in the study were acquainted with the purpose and the course of the study beforehand. Each respondent gave an informed consent prior to the inclusion in the study. They were told that they can withdraw during the course of the study. We took into account the principles of the Code of Ethics in Nursing Care of Slovenia (Kodeks etike v zdravstveni negi in oskrbi Slovenije, 2014), the Oviedo Convention and the Declaration of Helsinki.

Methodology of the analysis: since this is a comparative study of the data that have not been collected on the basis of a completely randomised 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 with a low level of the index. To carry out this process, we used a propensity score (Rosenbaum & Rubin, 1983, p. 41-55), which is a balancing score and methods of matching (Chapin, 1947; Greenwood, 1945). The propensity score was estimated on the basis of the observed covariates, which were selected based on the logicality 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:

$$\text{logit}(IK) = \beta_0 + \beta_{\text{gender}} + \beta_{\text{education}} \times \text{location} + \beta_{\text{age}} \times \text{gender}$$

where 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.

To carry this out we used the package R of MICE (Van Buuren & Groothuis-Oudshoorn, 2011, pp. 1-67).

4 Results
Welch’s t-test of the comparison of a matched sample between individuals with a high and a low index of living conditions estimates that there is a statistically significant difference between the two groups. As we can see from Table 2, those that have a high index of living conditions ($\bar{X}_V$) are more satisfied with life than those who have a low index of living conditions ($\bar{X}_N$). According to Diener’s life satisfaction scale, individuals with a high index of living conditions on average reach a high level of satisfaction $\bar{X}_V = 25.418$. Individuals with a
low index of living conditions on average reach an average or slightly below average level of satisfaction with life (\(\bar{X}_N = 19.923\)).

Table 2. Welch’s t-test index of living conditions

<table>
<thead>
<tr>
<th>LIVING CONDITIONS</th>
<th>(\bar{X}_V)</th>
<th>(\bar{X}_N)</th>
<th>95% confidence interval of difference between (\bar{X}_V) and (\bar{X}_N)</th>
<th>p-value</th>
<th>Maintained n (effective n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch’s t-test comparison of two samples</td>
<td>25.418</td>
<td>19.923</td>
<td>[4.445, 6.544]</td>
<td>0.000</td>
<td>58.14 % n=388</td>
</tr>
</tbody>
</table>

An estimate of the conditional association (Table 3) supplements the results of the t-test and evaluates the positive correlation between satisfaction with life and living conditions. If basic living conditions of the individual improve, while all other factors remain unchanged, the individual’s life satisfaction increases.

Table 3. Estimate of conditional association (relationship) between living conditions and satisfaction with life

<table>
<thead>
<tr>
<th>Living conditions</th>
<th>Estimated value</th>
<th>Standard error</th>
<th>p - value</th>
<th>Maintained n (effective n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26.671</td>
<td>2.092</td>
<td>0.000</td>
<td>58.14 % n=388</td>
</tr>
</tbody>
</table>

Welch’s t-test of the comparison of a matched sample among individuals with high and low lifestyle index estimates that there is a statistically significant difference between the two groups (Table 4). From the table we can see that those who have a high lifestyle index are more satisfied with their lives (\(\bar{X}_V = 24.280\)) than those with a low lifestyle index (\(\bar{X}_N = 21.190\)). Despite the statistically significant difference, the average values of life satisfaction of both groups fall into the same Diener’s category of life satisfaction, i.e. the average value of life satisfaction (20-24 points). It is true that the group with higher level of lifestyle is on the margin of the next Diener’s category, i.e. high value of life satisfaction, while the group with low lifestyle value only slightly exceeds the threshold between the category of below average and average life satisfaction.

Table 4. Welch’s t-test of lifestyle index

<table>
<thead>
<tr>
<th>LIFESTYLE</th>
<th>(\bar{X}_V)</th>
<th>(\bar{X}_N)</th>
<th>95% confidence interval of difference between (\bar{X}_V) and (\bar{X}_N)</th>
<th>p-value</th>
<th>Maintained n (effective n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch t-test comparison of two samples</td>
<td>24.280</td>
<td>21.190</td>
<td>[2.001, 4.179]</td>
<td>0.000</td>
<td>64.33 % n=422</td>
</tr>
</tbody>
</table>

The effective sample which was used in the analysis of this index amounted to 422 (64.33%). On the basis of the calculation of the confidence interval it can be seen that there is a 95% chance that the difference between the two groups is in the interval of [2.001, 4.179] (Table 4).

Based on the results of the assessment of conditional associations we observed a positive relationship between satisfaction with life and lifestyle (Table 5). When the lifestyle of the
individual improves, while all other factors remain unchanged, the individual's life satisfaction increases.

<table>
<thead>
<tr>
<th>Table 5. Assessment of conditional association (relationship) between lifestyle and satisfaction with life</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated value</strong></td>
</tr>
<tr>
<td>Lifestyle</td>
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</table>

The purpose of the comparative analysis of multiple R-squared is to show the size of the connection that each index has with satisfaction with life.

Estimates of multiple R-squared result from the analysis of variance, which was made based on the matched data. The dependent variable was satisfaction with life and the independent variable was the individual index (living conditions, lifestyle). Table 6 represents the values of the multiple R squared for each index, their level of statistical significance and the size of the matched sample (maintained/effective sample) on the basis of which the analysis of variance was made.

<table>
<thead>
<tr>
<th>Table 6. Multiple R-squared for individual index</th>
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<tbody>
<tr>
<td><strong>Multiple R-squared</strong></td>
</tr>
<tr>
<td><strong>SOCIAL FACTORS</strong></td>
</tr>
<tr>
<td>Life conditions</td>
</tr>
<tr>
<td>Lifestyle</td>
</tr>
</tbody>
</table>

Table 6 shows that the life satisfaction was strongly connected to the index of living conditions and weakly connected to the index of lifestyle.

The hypothesis can be confirmed, because we found that social factors influence satisfaction with life in old age, regardless of the fact that the two indexes (living conditions, lifestyle), which define social factors, have differently strong influences.

5 Discussion

With our research we wished to establish the connection between social factors and life satisfaction in the old age. We have established a positive connection between lifestyle and living conditions (social factors) and life satisfaction. We have as well established that living condition index is more closely connected to life satisfaction, whereas the lifestyle index is less closely connected to it. Therefore we can conclude that housing conditions, environment, financial position and safety are more closely connected to life satisfaction.

Valenčak (2012) notes that the qualitative research has shown, that it is, as regards the place of residence, old age friendly if the elderly can live at home, in their hometown. As old age unfriendly are, however, considered the following factors: the distance from a bigger town or
city, distance from the shopping centres and remoteness of the neighbours (p. 12). The ability to drive a car independently is in old age associated with the values of freedom and independence. In frame of the project »Old age friendly city« the research has shown that old age friendly public transport can in many ways ease the decision of old drivers to give away their driver's licence, in the interest of their own safety and the safety of others. (Voljč, 2010, p. 15). Valenčak (2012) also notes that in the field of old age friendly environments, old people living in cities and those living in rural areas have pointed out similar problems and values. That means that old people living in urban as well as those living in rural areas value the importance of the proximity of a doctor, shops, banks, acquaintances etc. (p. 18). In case of the old age weakness the majority of older people would, in case they would not be able to live at home, wish to live in a nursing home in their hometown.

The income and the socioeconomic status of an individual is, similarly to the other external factors of subjective well-being (gender, age, education, medical condition), connected to life satisfaction only to a lesser extent. According to the opinion of Kodrič (2014, p. 82), the quality of spending life in the third age is to a greater extent connected to the lifestyle and material status of an individual prior to retirement.

It is common knowledge that in Slovenia the living standard of old people is deteriorating. It looks like the old age has in this way become a financial risk for a considerable number of old people (Železnik, 2014, p. 50). Samek Ladovici et al. (2015) note that in elderly women, who live alone, the risk of poverty is higher (24,9%), than in single men (18,6%). More prone to poverty are single women and man with lower levels of education (p. 28). Older people, who are less educated, are generally speaking more prone to poverty.

Also Hlebec et al. (2010, p. 36) note that the data for Slovenia shows, that the old people are a highly vulnerable group, with almost twice as high a risk of poverty as the rest of the population. (p. 27). Saražin Klemenčič (2013) notes that the monthly income of 1200 EUR is received by 11 % of men and only by 4,2 % of women, whereas an income below 400 EUR is received by 32,2 % of women and 17 % of men (p. 152). The income of more than a half of the respondents is between 401 and 800 EUR (p. 156). Also the analysis of personal data leads to the conclusion that women are in old age more prone to poverty than men and more than their peers in the European union, yet despite their low income more than a quarter of them helps supporting their nearest. (p. 152).

Another factor that has a negative influence on the quality of life and consequently on the satisfaction with life are falls. Kavčič (2011, p. 181) states, that falls endanger old people's health, as they at an unfavourable outcome can change the life quality of an individual. The injuries, that can be caused by falls, are, according to R. Cijan and V. Cijan (2003, p. 95) taking the sixth place on the scale of the causes of death among the population of old people. Also when such injuries are not fatal, we can talk about severe physical injuries, which can cause immobility the emergence of the fear of moving, and are frequently a direct cause for
the person being placed in a social care institution. Akyol (2007, pp. 191-196) states, that approximately 30 % of old people aged 65 years and above experience falls, and that one half of people, aged 85 years and above, experience falls every year. According to the opinion of Zupan and Grmek Košnik (2011, p. 213) falls can be a consequence of ageing, that is the result of the weakening of the physical and mental functions of the organism.

Rodrigues, Lima and de Azevedo Barros (2013, p. 49) define falls as events that influence the health of old people, as they cause limitations, which show themselves in worse medical condition and worse quality of life of old people. Gullberg, Johnell and Kanis (1997, p. 409) state, that with the increasing old age the number of fractures has increased exponentially. More prone to fractures are women. The results of the above mentioned research show, that the number of the hip fractures is going to substantially increase in the next 35 years. According to the most conservative estimates, the number of hip fractures is going to increase for 135 % in men and for 100% in women. This expected increase in hip fractures is in men connected with the improved life expectancy (Lancaster, 1990, pp. 2-3). Zuc and Skela Savič (2012, p. 215) note, that the most frequent injury in an old person is a fracture, the most commonly injured body parts are an arm in women and a leg in men. Hip injuries are more common in women. Pfeifer and Kroker Kogoj (2014, p. 797) state, that regular physical activity can prevent falls and new fractures.

Starc and Zabukovec (2013b) have in an expansive Slovenian research titled »Staranje v Sloveniji« (Ageing in Slovenia) established that two thirds of inhabitants, aged 50 years and above, are satisfied with their lives. Similar findings are noted by Železnik (2012, p. 28). Stegmüller and Bakračevič Vukman (2012) state, that people in middle and late adulthood are on average happy with their lives. The results of the research, conducted by Borg, Halberg and Blomqvist (2006) have shown, that a general self-assessment of one's own health as bad and insufficient financial resources influence life satisfaction in an important way, whereas gender and living conditions do not influence life satisfaction in any considerable way.

In order to improve the living conditions of an individual, we have to:

- Improve an individual's housing conditions in a way that an individual is more satisfied with the conditions and with more healthy environment (for instance with the better quality of air, water, etc.),
- To improve the accessibility of healthcare services and social services,
- To improve the possibility of transport availability, which includes bus, train or own transport,
- To ensure that each individual has enough financial means to fulfil their daily needs,
- To ensure the safety of each individual in a way, that the individual feels more safe in their daily life.
As the lifestyle of an individual, as it was established in our case, is to a lesser degree connected to life satisfaction in old age, it can nevertheless be improved in the following manner:

- That the individual has five regular meals per day and that the composition of meals is in accordance with a balanced diet recommendations and food pyramid,
- With the prevention of excessive food intake, which can lead into over nourishment, due to metabolic changes in old age,
- By preventing malnutrition in an old person,
- That an old person follows the 12 steps to healthy eating,
- With the improvement of physical activity (regular daily physical activity, exercises for improving balance and muscle mass, attending group exercise classes for the elderly etc.),
- By abstaining from smoking and only moderate alcohol consumption, in accordance with the recommended guidelines.

The quality of life and with it connected satisfaction with life is therefore connected to the general level of wellbeing of an individual. (Fahey, Nolan, & Whelam, 2003, p. 9), which is connected to the level of the satisfying of his needs, aims, expectations and standards, and depends on the physical health of the individual, their psychological state, the state of their independence and their attitude towards their environment.

In spite of the fact, that our sample is not representative, we can on the basis of the results analysis generalize the results on the entire population of old people, as the analysis was conducted on balanced data. The hypothesis can be confirmed, as we have established that social factors influence the life satisfaction in old age, irrespective of the fact that two indexes that define social factors (living conditions, lifestyle), do not influence it to the same extent.

6 Conclusion

Each human being is a unique and unrepeatable whole in space and time, who has social, physical, psychological and spiritual needs. An individual as a whole is to a greater extent influenced by social factors, which enable a person to lead a fulfilled and quality life also in old age. In order for this to happen, suitable living conditions and a healthy lifestyle are important. Our research has shown that suitable housing conditions, safe environment and suitable financial position are more important factors for life satisfaction in old age than physical activity, nutrition, smoking and alcohol consumption. Irrespective of the differing levels of the influence that the indexes of both of the social factors exert, we have to be aware of the fact that ageing and the old age are perceived in different ways by each of us, therefore it is worth paying enough attention to the quality of life and consequently to the satisfaction with life, and to integrate the findings through research into the modern society, which is thus going to develop a positive attitude towards suitable living conditions of the old people.
The originality of our research shows itself in the studying of social factors within the holistic model of life satisfaction in the old age, which also includes the physical, psychological and spiritual factor.

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 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 enable us additional possibilities to discover new knowledge and search for 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 (2016) 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.

This paper with its originality importantly contributes to the understanding of life satisfaction in old age and to the importance of the holistic treatment of the elderly adults in their old age.

References


   Svetovni dan brez tobaka / strokovni posvet pasivno kajenje, Ljubljana 31. maj 2006 (ni pag.). 
   Ljubljana: Inštitut za varovanje zdravja Republike Slovenije
   M. Kožuh-Novak, A. Osterman, M. Pavliha, A. Žiberna (ur.), Starejši za starejše: za boljše 
   zdravje in višjo kakovost življenja doma (str. 11-16). Ljubljana: Ministrstvo za zdravje & 
   Zveza društev upokojencev Slovenije.
   v Evropi. Obzornik Zdravstvene Nege, 42(2), 87-97.
   Univerza v Ljubljani, Fakulteta za družbene vede. Pridobljeno na http://dk.fdv.uni-
   lj.si/magistrska/pdfs/mag_lah_ida.pdf
29. Leskošek, V. (2012). Social determinants of health: the indicators for measuring the impact of 
   poverty on health. Zdravstveno varstvo, 51(1), 21-32. doi: 10.2478/v10152-012-0004-
   Ljubljani, Oddelek za psihologijo.
   Vestnik, 83(11), 792-801.
   48-49.
   (Diplomsko delo). Alma Mater Europaea, Evropski center, Maribor.
   (str. 151-166). Ljubljana: Inštitut Antona Trstenjaka za gerontologijo in medgeneracijsko 
   sožitje.
36. Starejši za starost. 16(1), 3-19.


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Boris Miha Kaučič, MSc, has completed the professional study program of Nursing Care at the College of Nursing at the University of Maribor (today Faculty of Health Sciences, University of Maribor). At the Faculty of Organizational Sciences, University of Maribor, he has earned a university degree and at the same faculty he has completed his master’s degree in science in the field of social management. At present, he is studying and developing a holistic model of life satisfaction in old age within the framework of his doctoral studies at the Faculty of Organisational Studies in Novo mesto. He works at the College of Nursing in Celje as Vice Dean for educational activities and as a higher education teacher. He was the professional leader of the international research and development project HLAW (Healthy Lifestyle for Aging Well). In 2014, the Council of the National Agency for Quality in Higher Education of the Republic of Slovenia (NAKVIS) appointed him as an expert of NAKVIS. At Alma Mater Europaea-ECM he participates in the educational process at the department of health sciences and social gerontology. His bibliography in COBISS contains over 400 units.

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Bojana Filej, PhD, worked in the Health Centre Dr. Adolf Drolc Maribor as a home care nurse, as Head of Unit and the Head of Department and Assistant to Chief Nursing Officer. In 2005, she started working for the Faculty of Health Sciences, University of Maribor, where she had lectured since 1993. For a short time she was employed on a part-time basis at the College of Nursing in Jesenice. From 2010 to 2013 she was employed at the Faculty of Health Sciences, Novo mesto as a Dean. She was the leader of the Collaborative Centre of the World Health Organization for primary health care and vice president of the Chamber of Nursing in Slovenia and in the
years 2000-2007 its president. She has participated in numerous research projects. She is in the register of NAKVIS experts. She is a peer reviewer for journals Zdravstveno Varstvo (Slovenia) and Medycyna Pracy (Poland), member of the editorial board of Sestrinski glasnik (Croatia), South Eastern Europe Health Sciences Journal (Bosnia and Herzegovina) and Exlibris Biblioteka Gerontologii Społecznjej (Poland) and Chief Editor of Revija za zdravstvene vede (Journal of Health Sciences, Faculty of Health Sciences Novo mesto).

***

Marija Ovsenik, PhD, is a professor Emeritus and an expert in social gerontology. She received her PhD from the Faculty of Political Science Veljko Vlahović in Sarajevo and the Faculty of Organisational Studies in Novo mesto, at the University in Ljubljana she has undertaken a special training in the field of human resources management in nonprofit organizations. In 1996, the Ministry of Labour, Family and Social Affairs awarded her a prize for outstanding achievements in the field of social security. Marija Ovsenik is the author of numerous scientific and research publications. She is Head of the Department of Social Gerontology at the Alma Mater Europaea – ECM, she has lecturing experience as a lecturer at the Faculty of Social Work and the Faculty of Social Sciences, University of Ljubljana, Faculty of Organizational Sciences and the Faculty of Health Sciences, University of Maribor, and the Faculty of Sciences of Health in Izola. As a university professor she is involved in the educational process at the Faculty of Organisational Studies in Novo mesto.

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Povzetek:

Vpliv socialnih dejavnikov na zadovoljstvo z življenjem v starosti

Raziskovalno vprašanje (RV): Kakšna je povezanost socialnih dejavnikov z zadovoljstvom z življenjem v starosti?

Namen: Namen raziskave je ugotoviti vpliv socialnih dejavnikov na zadovoljstvo z življenjem v starosti.


Rezultati: Z zadovoljstvom z življenjem v starosti je močno povezan indeks življenjskih pogojev (pogoji bivanja, okolje, finančno stanje, varnost) in šibkeje povezan indeks življenjskih slogov (gibanje, prehrana, kajenje, uživanje alkohola).

Razprava: Na zadovoljstvo z življenjem v starosti pomembno vplivajo socialni dejavniki - ustrezni življenjski pogoji ter manj pomembno zdrav življenjski slog, ki človeku omogočajo kakovostno življenje tudi v pozni starosti.


Originalnost: Izvirnost raziskave je v proučevanju socialnega dejavnika v holističnem modelu zadovoljstva z življenjem v starosti, ki vključuje še fizični, psihični in duhovni dejavniki.

Omejitve/nadaljnje raziskovanje: Izvedena raziskava ima omejitve v izbrani metodologiji in velikosti vzorca. Rezultati so plod analize, ki je bila narejena na uravnoteženem študijskem načrtu, zato lahko rezultate pospoljšimo na populacijo starejših odraslih (65 let in več). V prihodnje bo potrebno pozornost nameniti proučevanju elementov posameznega indeksa socialnih dejavnikov in njihovih vplivov na zadovoljstvo z življenjem.

Ključne besede: socialni dejavniki, življenjski pogoji, življenjski slog, stari, domače okolje, socialno varstveni zavod.

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