

**Authors' Contribution:**

- A Study Design
- B Data Collection
- C Statistical Analysis
- D Data Interpretation
- E Manuscript Preparation
- F Literature Search
- G Funds Collection

# The quality of life profile among students of the University of the Third Age

Ewa Kupcewicz<sup>ABCDEFG</sup>, Małgorzata Kuśmierczyk<sup>DEFG</sup>, Barbara Wilk<sup>DEFG</sup>,  
Agnieszka Zajączkowska<sup>ABC</sup>, Aleksandra Zakrzewska<sup>ABC</sup>

Department of Public Health, Józef Rusiecki University College in Olsztyn, Poland

## abstract

- Background** The quality of life is determined by numerous factors, among others, social, biological and psychological ones, whereas satisfaction with life and good self-esteem related to health are one of its main measures. The purpose of the paper was to determine the quality of life of the Third Age University students.
- Material/Methods** The study group involved 130 students of the University of the Third Age in Kętrzyn and Szczytno. The vast majority were women (90.00%; n = 117), and their mean age was 65.4 ± 5.9 years. The study used the author's questionnaire containing questions about socio-demographic data and the WHOQoL-BREF questionnaire allowing to obtain the quality of life profile within four domains: somatic, psychological, social, environmental ones. The significance level  $p < 0.05$  was assumed to interpret the hypotheses.
- Results** In the analysis, the somatic domain had the highest scores (14.58 ± 3.10), while the social domain had the lowest (13.03 ± 3.48) one. The mean level of satisfaction with the overall quality of life was (3.58 ± 0.68), and it was higher when compared to satisfaction with the overall quality of health (3.31 ± 0.97). The material-financial situation significantly determined the respondents' quality of life within three domains: somatic (H = 9.94;  $p < 0.02$ ), social (H = 10.37;  $p < 0.02$ ), environmental (H = 17.58;  $p < 0.0005$ ). Whereas, their education had a significant (H = 8.41;  $p < 0.04$ ) effect on the sense of the quality of life in the psychological domain. Persons with secondary education pointed to a higher level of the quality of life than those with primary education.
- Conclusions** The improvement in the material-financial situation will positively affect the perception of the quality of life within three domains: somatic, social, and environmental ones.
- Key words** quality of life profile, older people

## article details

- Article statistics** **Word count:** 3,714; **Tables:** 4; **Figures:** 1; **References:** 37  
**Received:** June 2016; **Accepted:** July 2016; **Published:** September 2016  
<http://www.balticsportscience.com>
- Full-text PDF:** <http://www.balticsportscience.com>
- Copyright** © Gdansk University of Physical Education and Sport, Poland
- Indexation:** AGRO, Celdes, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, De Gruyter - IBR (International Bibliography of Reviews of Scholarly Literature in the Humanities and Social Sciences), De Gruyter - IBZ (International Bibliography of Periodical Literature in the Humanities and Social Sciences), DOAJ, EBSCO - Central & Eastern European Academic Source, EBSCO - SPORTDiscus, EBSCO Discovery Service, Google Scholar, Index Copernicus, J-Gate, Naviga (Softweco, Primo Central (ExLibris), ProQuest - Family Health, ProQuest - Health & Medical Complete, ProQuest - Illustrata: Health Sciences, ProQuest - Nursing & Allied Health Source, Summon (Serials Solutions/ProQuest, TDOne (TDNet), Ulrich's Periodicals Directory/ulrichsweb, WorldCat (OCLC)
- Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.
- Conflict of interest:** Authors have declared that no competing interest exists.
- Corresponding author:** Dr n. med. Ewa Kupcewicz, Olsztyńska Szkoła Wyższa im Jozefa Rusieckiego, ul. Bygdoska 33, 10-243 Olsztyn, Poland, e-mail: [ekupcewicz@wp.pl](mailto:ekupcewicz@wp.pl)
- Open Access License:** This is an open access article distributed under the terms of the Creative Commons Attribution-Non-commercial 4.0 International (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, the use is non-commercial and is otherwise in compliance with the license.

## INTRODUCTION

Quality of Life - (QoL) is a subject of interest in many scientific disciplines and is a multi-dimensional concept that reflects various aspects of human functioning. In literature there are many definitions and many concepts determining the criteria for describing the quality of life [1, 2]. Due to multiplicity of such definitions, Trzebiatowski, dealing with systematization of the definitions of quality of life from the perspective of social sciences, suggested a division into four groups. The first group is called existential, the second includes other definitions focused on so-called "life-oriented" tasks, the third group locates the quality of life within the area of needs, and the fourth one distinguishes objective and subjective trends connected with the quality of life, where the concept of needs is taken into account [1].

In the field of psychology Czapiński claims that the concept of the "quality of life" can be identified with the concepts of welfare or happiness and its measurement can be made with the use of objective and subjective indicators. The objective ones are those related with living conditions, whereas the subjective ones refer to individual evaluation criteria [1, 3, 4]. Nordenfelt claims that the concept of the "quality of life" is connected with subjective cognition and the "emotional perception of the world" [1, 5]. Kowalik, like Nordenfelt, believes that the quality of life can be understood in two ways: either as a perception of one's own life resulting from an individual's experience, or as a perception of one's own life throughout the process of living [1, 6]. The quality of life from the sociological perspective reflects the ways of achieving satisfaction in reference to various human needs, including the level of satisfaction regarding living standards [7, 8].

On the basis of medical science the concept of the quality of life introduced by Shipper is strictly connected with health (health related quality of life - HRQoL). Shipper states that health can significantly affect life and human functioning, and consequently - affect the assessment of the quality of life [9]. As indicated by some researchers, HRQoL is an issue narrower than QoL, since it is limited to the assessment of the impact of health or diseases on the quality of life [10, 11]. Thus, quality of life is determined by many factors - including social, biological, psychological ones and yet life satisfaction and good health are some of its main indicators [12].

The concept of quality of life is an inseparable part of health, defined by the World Health Organization (WHO) as complete physical, mental and social well-being, not merely the absence of a disease or infirmity [13, 14]. WHO presents the quality of life as an individual's personal perception of their position in life, in the context of culture and the system of values in which they live, as well as in relation to the individual's goals, expectations, standards and concerns [15, 16]. Regardless of the individual's age, the quality of life is a reflection of their own position in life. In this paper it will refer to the period of late adulthood.

Aging is a natural, multi-faceted and irreversible process. The consequences include individually led processes of involution in the biological, functional, social and psychological spheres [17, 18, 19]. Depending also on the specific life conditions of an individual, both the process of aging and the old age may be diversified and thus analysed from both positive (social activity in every-

day life, broadening the range of interests, beneficial use of leisure time) and negative aspects (no acceptance in the surrounding group of people, worse position of the individual in family and in society, a sense of helplessness and uselessness) [20].

Many researchers show that social integration is very important to the general well-being of older people living at home, because social activity and contacts improve their quality of life [21, 22]. The uniqueness of human life means that everyone ages differently and staying active is an essential factor affecting the level of the quality of life among older people. The University of the Third Age (UTA) gives elderly people a possibility to take up various forms of activities. The main objective of the UTA is activation of elderly people, a necessary condition for positive aging, which allows one to reach “an old age with a low risk of disease and infirmity, in good mental and physical condition and well-maintained life activeness” [23].

In this paper we attempt to answer the question: To what extent do socio-demographic factors determine the quality of life profile among students of the University of the Third Age? The aim of this study was to determine the profile of the quality of life among students of the University of the Third Age.

## MATERIAL AND METHODS

The survey was carried out in the 4th quarter of 2015. 130 students of the University of the Third Age participated in it, including: 71 persons (54.62%) students of the University of the Third Age in Kętrzyn and 59 persons (45.38%) from the Association “University of the Third Age” in Szczytno.

Table 1. The subjects’ socio-demographic characteristics

	Variables	N	%
Sex	female	117	90.00
	male	13	10.00
Age	≤ 60 years old	24	18.46
	61-65	50	38.46
	66-70	37	28.46
	≥ 71 years old	19	14.62
Marital status	single	8	6.15
	married	77	59.23
	widow/widower	38	29.23
	divorced	7	5.38
Financial situation	very good	28	21.54
	good	62	47.69
	sufficient	31	23.85
Education	poor	9	6.92
	primary school	45	34.62
	vocational training	20	15.38
	secondary	32	24.62
	higher	33	25.38

Random selection was used and the respondents were informed about the study and its compliance with legal provisions regarding the right to confidentiality. Everyone gave their consent to participate in the study. The vast majority were women 90.00% (n = 117), whereas there were only 10.00% (n = 13) of men. The respondents’ age ranged from 52 to 84 years, with the average age being 65.4 ± 5.9 years. A numerous group of respondents were in the age group between 61-65 (n = 50; 38.46%). Quite a large group of respondents (59.23%; n = 77)

indicated that they were married, but 38 people (29.23%) reported that their life partners had died. In the group of respondents 35.00% (n = 45) were people with primary education and 25.00% had secondary and higher education. Nearly half of the respondents (47.69%; n = 62) described their material-financial situation as good and about 30.00% as satisfactory or poor (Table 1).

A diagnostic survey method was used in the study. The data were collected with a use of a questionnaire prepared by the authors. The questionnaire contained basic questions about the socio-demographic situation. The data concerning the quality of life were collected with a use of a shortened version of the WHOQoL-Bref questionnaire in the Polish adaptation by Wołowicka and Jaracz, which includes 26 questions and allows obtaining a profile of the quality of life in four domains: somatic, psychological, social and environmental one. There were two questions assessing the perception of the quality of life and the quality of health, which were analysed separately. The respondents gave answers in a 5-point scale (range 1–5). In each of the areas the respondent could collect a maximum of 20 points. The results in different fields have a positive direction (the higher the score, the higher the quality of life).

The reliability of the Polish version of WHOQoL-Bref is similar to the original version. The  $\alpha$ -Cronbach factor was very high both in reference to the assessment of the individual criteria (results from 0.69 to 0.81) and to the whole questionnaire (0.90) [24]. To evaluate the variation of mean values observed, the U-Mann-Whitney test was used. To evaluate the diversity of quality of life in groups of socio-demographic variables ANOVA Kruskal-Wallis test was used. For a detailed analysis of the characteristics of differentiation between groups, a multiple ranks comparison test was used for all samples. The level of significance was  $p < 0.05$ . Statistical analysis was performed with the use of STATISTICA 10 PL package.

## RESULTS

The analysis of the collected research material showed that the average quality of life in the somatic domain which includes daily activities, dependence on medication and treatment, energy and fatigue, mobility, pain and discomfort, rest and sleep and ability to work reached the highest level in the observed group and was  $14.58 \pm 3.10$  with a median of 16.00. In the second place, the respondents pointed out the environmental domain with an average of  $13.70 \pm 2.66$  and a median of 14.00. Its scope includes: financial resources, freedom, physical and mental security, health and health care, access to and the quality of healthcare, home setting, opportunities to acquire new information and skills, opportunities and participation in recreation and leisure, the surroundings (pollution, noise, traffic, climate), transportation.

Then the respondents pointed to the psychological domain which includes a range of mental functioning, appearance, negative feelings, positive feelings, self-esteem, spirituality, religion, faith, ways of thinking, learning, memory, concentration. The average quality of life in the of psychological sphere among the participants of the study was  $13.32 \pm 2.65$  and the median was 14.00. The lowest assessments referred to the social domain which includes personal relationships, social support and sexual activity. The average quality of life reached  $13.03 \pm 3.48$  and the median was 13.33. The average level of satis-

faction regarding the overall quality of life among the UTA students was  $3.58 \pm 0.68$  with a median of 4, and satisfaction with the overall quality of health  $3.31 \pm 0.97$  with a median of 3 (Table 2).

Table 2. Characteristics of the domains of the quality of life according to WHOQoL-Bref questionnaire (n = 130)

Components of the WHOQoL-Bref questionnaire	M	Me	Min	Max	Max-Min	SD
	D1 - somatic domain	14.58	16.00	0.00	20.00	20.00
D2 - psychological domain	13.32	14.00	1.33	18.00	16.67	2.65
D3 - social domain	13.03	13.33	2.67	20.00	17.33	3.48
D4 - environmental domain	13.70	14.00	2.00	19.50	17.50	2.66
Q1 - satisfaction with the overall quality of life	3.58	4.00	0.00	5.00	5.00	0.68
Q2 - satisfaction with the overall quality of health	3.31	3.00	0.00	5.00	5.00	0.97

Explanation: M - arithmetic mean, SD - standard deviation, Me - median

Figure 1 shows the comparison of the average quality of life indicators in different domains of functioning.

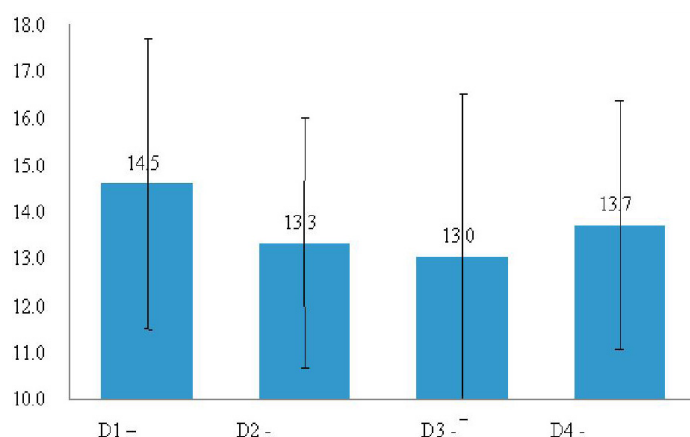


Fig. 1. Comparison of the average quality of life indicators in the domains of functioning according to the WHOQOL-Bref questionnaire

A comparison of average indicators of the quality of life and the quality of health and their components in both groups (students from Kętrzyn and from Szczytno) showed no statistically significant differences between the groups in the overall quality of life and the general quality of health and functioning of each domain. To know the profile of the quality of life of the UTA groups some aspects were compared - the significance of differences in the overall quality of life and the overall quality of health for independent variables: gender, age, marital status, education and material and financial situation. It was found that, above all, the material and financial situation has a statistically significant effect on the overall quality of life ( $H = 20.04$ ;  $p < 0.002$ ) and the overall quality of health ( $H = 7.75$ ;  $p < 0.05$ ) among the respondents. As a result of detailed analysis in the classroom grouping variables, we found large differences between the groups. Students who indicated that they had poor material and financial situation showed a significantly lower overall level of quality of life than those with very good ( $p < 0.00002$ ), good ( $p < 0.000002$ ) and sufficient financial situation ( $p < 0.002$ ).

In the case of the perception of the quality of health, the differences between the groups were not so evident. Students who declared that their material and financial situation was poor showed significantly lower levels of the quality of life than people with a very good financial situation ( $p < 0.03$ ). It was also found that age significantly differentiated the overall quality of life ( $H = 8.49$ ;  $p < 0.04$ ) among respondents. People aged 66–70 gave answers that were of statistical significance ( $p < 0.02$ ) and below the average (3.35) in comparison to respondents from the group of 60-year-olds and below (3.75), who showed statistically significant ( $p < 0.04$ ) lower average (3.74) than respondents from the oldest group. Not reaching statistical confirmation in such criteria as sex, marital status or education appeared not to have any impact on the overall quality of life. Similarly, age did not affect the overall quality of health among the UTA groups (Table 3).

Table 3. Comparison of the significance of differences in overall quality of life and quality of health of WHOQoL-Bref questionnaire

Variables		General quality of life		General quality of health	
		M	SD	M	SD
Sex	N	H = 0.32; $p < 0.98$		H = 0.16; $p < 0.68$	
Female	117	3.58	0.70	3.32	0.95
Male	13	3.62	0.51	3.15	1.14
Age	N	H = 8.49; $p < 0.04$ *		H = 1.09; $p < 0.77$	
60 y old and younger	24	3.75	0.85	3.42	0.93
61-65	50	3.62	0.53	3.32	0.82
66-70	37	3.35	0.79	3.38	0.86
71 y old and more	19	3.74	0.45	3.00	1.49
Marital status	N	H = 0.86; $p < 0.83$		H = 3.29; $p < 0.34$	
Single	8	3.75	0.46	3.38	0.52
Married	77	3.62	0.63	3.39	0.85
Widow/widower	38	3.47	0.83	3.26	1.16
Divorced	7	3.57	0.53	2.57	1.40
Education	N	H = 3.08; $p < 0.37$		H = 2.81; $p < 0.42$	
Primary education	45	3.58	0.62	3.42	0.87
Vocational training	20	3.40	0.68	3.25	1.07
Secondary	32	3.66	0.83	3.00	1.30
Higher	33	3.64	0.60	3.48	0.57
Financial situation	N	H = 20.04; $p < 0.002$ ***		H = 7.75; $p < 0.05$ *	
Very good	28	3.71	0.60	3.57	0.50
Good	62	3.76	0.47	3.37	0.91
Sufficient	31	3.39	0.80	3.10	1.30
Poor	9	2.67	0.87	2.78	0.97

Statistically significant:  $p < 0.05$ \*;  $p < 0.01$ \*\*;  $p < 0.001$ \*\*\*

Subsequently, a comparison of the significance of differences in the sense of quality of life among UTA groups in the somatic, psychological, social and environment domains was carried out. It was based on independent varia-

bles: the subjects' gender, age, marital status, education, and material and financial situation. As a result of the analysis, it was found that the material and financial situation significantly determines the quality of life among UTA groups and it affects three domains: somatic ( $H = 9.94$ ;  $p < 0.02$ ), social ( $H = 10.37$ ;  $p < 0.02$ ) and environmental ( $H = 17.58$ ;  $p < 0.0005$ ). Wealthier people, who declared to have very good and good material and financial situation, achieved a significantly higher level of the quality of life than those whose financial situation was poor. The respondents' gender was the second variable that significantly differentiated the quality of life within the somatic domain ( $H = 4.63$ ;  $p < 0.03$ ). Men showed a higher quality of life level than women in this domain. In addition, the analyses proved that the level of education of the examined people gave statistically significant differences ( $H = 8.41$ ;  $p < 0.04$ ) in the psychological domain. People with secondary education declared to have a higher quality of life than people with primary education at the significance level of  $p < 0.05$  (Table 4).

Table 4. Comparison of the significance of differences in the quality of life in the domains of functioning according to the WHOQoL-Bref questionnaire.

Variables	N	Somatic domain		Psychological domain		Social domain		Environmental domain	
		M	SD	M	SD	M	SD	M	SD
Sex	N	H = 4.63; $p < 0.03^*$		H = 0.27; $p < 0.59$		H = 1.69; $p < 0.19$		H = 0.03; $p < 0.84$	
Female	117	14.39	3.11	13.37	2.67	12.88	3.50	13.65	2.70
Male	13	16.31	2.56	12.92	2.56	14.36	3.13	14.15	2.27
Age	N	H = 0.51; $p < 0.47$		H = 4.78; $p < 0.18$		H = 3.51; $p < 0.31$		H = 1.91; $p < 0.59$	
60 y old and younger	24	13.83	2.88	14.19	2.18	14.17	3.21	14.06	2.83
61-65	50	14.64	2.98	13.24	2.90	12.93	3.51	13.37	2.71
66-70	37	14.92	3.48	12.92	2.68	12.61	3.48	13.93	2.71
71 y old and more	19	14.74	3.00	13.23	2.42	12.63	3.67	13.66	2.27
Marital status	N	H = 2.89; $p < 0.40$		H = 1.79; $p < 0.69$		H = 6.43; $p < 0.09$		H = 3.84; $p < 0.27$	
Single	8	13.50	2.98	13.42	2.32	11.67	3.09	12.75	1.10
Married	77	14.55	2.67	13.50	2.34	13.61	3.28	13.83	2.31
Widow/widower	38	14.74	3.96	13.23	3.02	12.39	3.67	13.75	3.05
Divorced	7	15.43	2.76	11.81	4.03	11.62	4.34	13.07	4.89
Education	N	H = 1.27; $p < 0.73$		H = 8.41; $p < 0.04^*$		H = 2.67; $p < 0.44$		H = 0.60; $p < 0.89$	
Primary school	45	14.31	3.25	12.65	2.66	13.01	2.90	13.67	2.28
Vocational training	20	14.20	4.20	14.03	2.02	13.53	3.55	14.08	2.75
Secondary	32	15.13	2.43	14.00	2.77	13.54	3.49	13.63	2.79
Higher	33	14.67	2.77	13.15	2.71	12.24	4.12	13.59	3.04
Financial situation	N	H = 9.94; $p < 0.02^*$		H = 4.88; $p < 0.18$		H = 10.37; $p < 0.02^*$		H = 17.58; $p < 0.0005^{***}$	
Very good	28	14.71	2.89	13.40	2.17	13.86	2.89	14.39	2.37
Good	62	14.71	2.78	13.77	2.55	13.66	3.13	14.29	2.11
Sufficient	31	15.23	2.81	12.45	3.14	11.61	3.91	12.52	3.21
Poor	9	11.11	4.81	12.96	2.52	10.96	4.15	11.56	2.79

Statistically significant:  $p < 0.05^*$ ;  $p < 0.01^{**}$ ;  $p < 0.001^{***}$



## DISCUSSION

The World Health Organization emphasizes the need to support initiatives that activate senior citizens in various ways. The care organized for elderly people should primarily focus on the quality of life that includes every sphere of human existence [25]. The results of this study indicate that the quality of life of UTA groups in Kętrzyn and Szczytno varied in all the analysed domains of functioning. The highest rate was achieved in the somatic domain ( $14.58 \pm 3.10$ ), followed by the environmental domain ( $13.70 \pm 2.66$ ) and the psychological one ( $13.32 \pm 2.65$ ), whereas the lowest one was in the social domain ( $13.03 \pm 3.48$ ). Similar results were obtained in studies of other authors who in 2006–2007 conducted a study on a group of 185 people aged 60–80, including 120 UTA students in Kielce and 65 people not attending this form of activity. The study used a Polish version of the WHOQoL-100 questionnaire, which allows creating a profile of the quality of life in 6 areas. The results within the UTA group included: physical exercise ( $14.57 \pm 2.41$ ), the psychological aspect ( $13.43 \pm 1.96$ ), social relationships ( $12.76 \pm 2.01$ ), functioning within one's own environment ( $13.59 \pm 1.89$ ), the level of independence ( $15.31 \pm 2.41$ ) and spirituality ( $14.04 \pm 2.51$ ) [26].

In our study, more than  $\frac{1}{3}$  of the UTA students (34.62%;  $n = 45$ ) had primary education, some declared secondary (24.62%;  $n = 32$ ) and some higher education (25.38%;  $n = 33$ ). Education of the surveyed people appeared to be statistically significant ( $H = 8.41$ ;  $p < 0.04$ ) and it affected the quality of life of the UTA within the psychological domain. People with secondary education assessed their quality of life as higher than those with primary education. In turn, the research conducted by Zielińska-Więczkowska and Kędziora-Kornatowska in a group of 80 UTA students in Bydgoszcz showed that the dominant group (70%) were people with secondary education [27]. A review of a number of previous studies shows that the quality of life of older people is significantly determined by the individuals' level of education [28, 29, 30, 31]. Higher levels of education correlate with higher parameters of the quality of life and vice versa. According to Halik, better educated people enjoy a higher level of mental well-being. Good mood is four times more common among people with higher education than among those with the basic one. Education is an important determinant of confidence in successful future [32]. The results of this study indicate that age significantly differentiated the overall quality of life ( $H = 8.49$ ;  $p < 0.04$ ) of patients. People aged 66–70 had significantly ( $p < 0.02$ ) lower mean (3.35) than the group of respondents at the age 60 and below (3.75), as well as significantly ( $p < 0.04$ ) lower average levels (3.74) than the respondents from the oldest group.

A survey conducted by Rybka and Haor, focused on the quality of life in a group of 600 people aged 60 and above with the use of WHO-Bref questionnaire, is worth mentioning. It showed that the quality of life of older people depended on a number of socio-demographic variables, mainly including age, sex, education and marital status. The variable "age" strongly correlated with the field of environmental, physical and psychological dependence. All interrelations were negative in nature, which means that there was a connection – the higher the age, the lower the quality of life in respective fields [33].

The research conducted in the years 2005–2006 in Brazil on a group of 120 senior citizens (UTA) proved that the people perceived as "younger" than the-



ir actual calendar age was, obtained the highest parameters of the quality of life in all areas of daily functioning [34]. One of the factors affecting the quality of life of seniors is the socio-economic factor. Research on the socio-economic situation of Polish seniors and their subjective assessment of the quality of life was conducted among 528 of Krakow inhabitants by Knurowski et al. The results confirmed the impact of some determinants, such as higher education, income exceeding the national average and possession of one's own apartment on a high quality of life level among the respondents [35].

In our study, the most differentiating factor affecting the quality of life was the respondents' financial situation. The material and financial situation significantly determined the quality of life of students within the somatic ( $H = 9.94$ ;  $p < 0.02$ ), social ( $H = 10.37$ ;  $p < 0.02$ ) and environmental domains ( $H = 17.58$ ;  $p < 0.0005$ ). Wealthier people, whose material status was declared as very good and good achieved a significantly higher quality of life level than those whose situation was poor. Mozhan et al. conducted an international study in 23 countries on a group of 7,401 senior citizens, whose average age was 73.1. The ability to carry out everyday activities was recorded as the highest average in all countries except Japan, China and Hong Kong, Brazil, Turkey and Lithuania. Health, as the most important factor, was rated highest by the respondents from Japan, China, Hong Kong and Turkey.

In the analysis of the quality of life UTA students another study should be taken into account. It was carried out by Gajewska et al. in 2011 among 250 participants attending courses at the UTA Association in Płock. The relationship between the individuals' assessment of their health and age, their well-being, suffering from diseases and a subjective assessment of their happiness along with the ability to walk independently was stated [37].

## CONCLUSIONS

1. The profile of the quality of life and quality of health among students of the University of the Third Age is affected by: the material and financial situation, age, gender and education.
2. From the perspective of the achieved results, an improvement in the material and financial situation among the students of the University of the Third Age might improve their perception of the quality of life and health within three domains: somatic, social and environmental ones.
3. There is a need to improve mental health of the population of aging people in Poland through an implementation of programs promoting mental health and well-being among elderly people with lower levels of education.

## REFERENCES

- [1] Trzebiatowski J. Jakość życia w perspektywie nauk społecznych i medycznych - systematyzacja ujęć definicyjnych [Quality of life in the social and medical sciences - systematizing of definitions]. *Hygeia Public Health*. 2011;46(1):25-31. Polish.
- [2] Papuć E. Jakość życia - definicje i sposoby jej ujmowania [Quality of life - definitions and approaches]. *Curr Probl Psychiatr*. 2011;12(2):141-145. Polish.
- [3] Czapiński J. Psychologiczne teorie szczęścia [Psychological theories of happiness]. In: Czapiński J, editor. *Psychologia pozytywna. Nauka o szczęściu, zdrowiu, sile i cnotach człowieka* [A positive psychology. On happiness, health and human virtues]. Warszawa: PWN; 2004, 51-102. Polish.

- [4] Czapiński J. Psychologia szczęścia: przegląd badań teorii cebulowej [Psychology of happiness: Review of the onion theory]. Warszawa-Poznań: Akademos; 1992. Polish.
- [5] Nordenfelt L. Quality of life, health and happiness. Avebury: Aldershot; 1993.
- [6] Kowalik S. Pomiar jakości życia - kontrowersje teoretyczne [Measurement of quality of life - controversions. In: Bańka A, Derbis R, eds. Pomiar i poczucie jakości życia u aktywnych zawodowo i bezrobotnych [Measurements and self-rated quality of life in the employed and the unemployed]. Poznań-Częstochowa: UAM and WSP; 1995. Polish.
- [7] Tobiasz-Adamczyk B. Jakość życia w naukach społecznych i medycynie [Quality of life in social sciences and medicine]. Sztuka Leczenia. 1996;2:33-40. Polish.
- [8] Albrecht GL, Fitzpatrick R. A social perspective on health related quality of life research. In: Albrecht GL, Fitzpatrick R, eds. Advances in medical sociology, quality of life in health care. Vol 5. Greenwich CT, London, UK: Jai Press; 1994, 1-21.
- [9] Shipper H. Quality of life: principles of the clinical paradigm. J Psychosoc Oncol. 1990;8(23): 171-185.
- [10] Guyatt GH, Feeny DH, Patrick DL. Measuring health-related quality of life. Ann Intern Med. 1993;118:622-629.
- [11] Muldoon MF, Barger SD, Flory JD, Manuck SB. What are quality of life measurements measuring? BMJ. 1998;316:542-545.
- [12] Fry PS. Predictors of health-related quality of life perspectives, self-esteem, and life satisfactions of older adults following spousal loss: an 18-month follow-up study of widows and widowers. The Gerontologist. 2001;41(6):787-798.
- [13] World Health Organization. The constitution of the World Health Organization. WHO Chron. 1947;1:29.
- [14] Juczyński Z. Narzędzia pomiaru w promocji i psychologii zdrowia [Measurement tools in health promotion and health psychology]. Warszawa: Pracownia Testów Psychologicznych; 2012. Polish.
- [15] WHOQOL Group. What Quality of Life? World Health Forum. 1996;17:354-356.
- [16] Ostrzyżek A. Jakość życia w chorobach przewlekłych [Quality of life in chronic diseases]. Probl Hig Epidemiol. 2008;89(4):467-470. Polish.
- [17] Kostka T. Znaczenie aktywności ruchowej w podeszłym wieku [Meaning of physical activity in the elderly]. In: Karasek M, editor. Aspekty medyczne starzenia się człowieka [Aspects of human aging]. Łódź: Łódzkie Towarzystwo Naukowe; 2008, 263-283. Polish.
- [18] Dziegielewska M. Wolontariat ludzi starszych (na przykładzie wolontariuszy w regionie łódzkim) [Voluntary service of the elderly (based on the example of volunteers in the Łódź region, Poland)]. In: Steuden S, Marczuk M, eds. Starzenie się a satysfakcja z życia [Aging vs satisfaction of life]. Lublin: Wydawnictwo KUL; 2009, 262-271. Polish.
- [19] Kleinspehn-Ammerlahn A, Kotter-Grühn D, Smith J. Self-perceptions of aging: do subjective age and satisfaction with aging change during old age? J Gerontol B Psychol Sci Soc Sci. 2008;63(6):377-385.
- [20] Dubas E. Starość znana i nieznaną - wybrane refleksje nad współczesną starością [Old age known and unknown - chosen reflections]. Rocznik Andragogiczny. 2013;20:133-152. Polish.
- [21] Cavallero P, Morino-Abbele F, Bertocci B. The social relations of the elderly. Arch Gerontol Geriatr. 2007;44(1):97-100.
- [22] Golden J, Conroy RM, Bruce I, et al. Loneliness, social support networks, mood and wellbeing in community-dwelling elderly. Int J Geriatr Psychiatry. 2009;24(7):694-700.
- [23] Gryglewska B. Prewencja gerontologiczna [Gerontologic prevention]. In: Grodzicki T, Kocemba J, Skalska A, eds. Geriatria z elementami gerontologii ogólnej [Geriatrics incl. comprehensive gerontology elements]. Gdańsk: Via Medica; 2006, 47-52. Polish.
- [24] Jaracz K, Wołowicka L, Kalfoss M. Quality of life in Polish respondents. Qual Life Res Int J. 1999;565.
- [25] Lewandowska A. Expectations of nursing homes pensioners. In: Olchowik G, editor. Wellness in different phases of life. Lublin: Wyd Neuro Centrum; 2008, 115-119.
- [26] Kozieł D, Trafiałek E. Kształcenie na Uniwersytetach Trzeciego Wieku a jakość życia seniorów [Education at Third Age Universities vs quality of life of the elderly]. Gerontol Pol. 2007;15(3):104-108. Polish.
- [27] Zielińska-Więczkowska H, Kędzióra-Kornatowska K. Jakość starzenia się i starości w subiektywnej ocenie słuchaczy Uniwersytetu Trzeciego Wieku [Quality of aging and the old age in the perception of UTA students]. Gerontom Pol. 2009;17(3):137-142. Polish.
- [28] Marcinek P. Funkcjonowanie intelektualne w starości [Mental functioning in old age]. Gerontom Pol. 2007;15:76-81. Polish.
- [29] Halicka M. Rodzina - czynnik warunkujący satysfakcję życiową w starości [Family - a factor determining life satisfaction in old age]. Annales UMCS, Lublin. 2004;59(14),148:289-294. Polish.
- [30] Alexandre, TS, Cordeiro, RC, Ramos, LR. Factors associated to quality of life in active elderly. Rev Sau' de Pu' blica. 2009;4:613-621.
- [31] Marczuk M. O wyższą jakość życia ludzi starszych [For higher quality of life in elderly people]. In: Bednarczyk H, editor. Edukacja dorosłych - służba społeczna [Education of adults - social service]. Warszawa: Wyższa Szkoła Pedagogiczna; 2002, 173-188. Polish.
- [32] Halik J. Samopoczucie osób starszych i jego uwarunkowania [State of being in elderly people and its determinants]. In: Halik J, editor. Starzy ludzie w Polsce. Społeczne i zdrowotne skutki starzenia się społeczeństwa [Elderly people in Poland. Social and health effects of aging of societies]. Warszawa: Instytut Spraw Publicznych; 2002, 71-75. Polish.
- [33] Rybka M, Haor B. Jakość życia osób w wieku podeszłym [Quality of life in the elderly]. Zeszyty Naukowe WSHE, Włocławek. 2013;37:157-166.

- [34] Alexandre TS, Cordeiro RC, Ramos LR. Factors associated to quality of life in active elderly. *Rev Sau`de Pu`blica.* 2009;4:613-621.
- [35] Knurowski T, van Dijk JP, Geckova AM, Brzyski P, Tobiasz-Adamczyk B, van den Heuvel WJ. Socio-economic health differences among the elderly population in Krakow, Poland. *Soz Praventivmed.* 2005;50(3):177-85.
- [36] Mozhan A, Skevington SM, Kalfoss M, Makaroff KS. The importance of facets of quality of life to older adults: an international investigation. *Qual Life Res.* 2010;19(2):293-298.
- [37] Gajewska O, Bryła M, Maniecka-Bryła I. Samoocena stanu zdrowia uczestników zajęć Stowarzyszenia Uniwersytetu Trzeciego Wieku [Self-rated health of The Third Age University Association course participants]. *Hygeia Public Health.* 2012;47(4):453-459. Polish.

**Cite this article as:**

**Kupciewicz E, Kuśmierczyk M, Wilk B, Zajączkowska A, Zakrzewska A.** The quality of life profile among students of the University of the Third Age. *Balt J Health Phys Act.* 2016;8(3):49-59.