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COMPARATIVE ANALYSIS OF STUDENTS' QUALITY OF LIFE IN POLAND AND RUSSIA

Abstract: *The main purpose of the article is to compare different quality of life variables in Poland and Russia. The study presents definitional problems associated with the concept of quality of life and defines its various dimensions. The study reviews the subject literature applying a descriptive method as well as presents own empirical research. The research project was based on the surveys carried out among Polish students of the Cracow University of Economics and Russian students of the Saint – Petersburg State University of Economics. The research was carried out in the second quarter of 2018 using the G-Suit package. The research-based questionnaire was conducted as a CSAQ (Computerized Self – Administered Questionnaire), a computer-based questionnaire where respondents were giving their answers directly. The collected data were analysed using the methods of single, double and multidimensional statistics and developed using the SPSS 25.*

Keywords: *Quality of life, Students, Emerging adulthood, Comparative research*

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1. Introduction

The concept “quality of life” (QoL) is nowadays broadly used both in academic writing and everyday life. The term “quality of life” was first used by A.C. Pigou in (1920) in his book about economic well-being. There was no reaction to this work, and it was unnoticed until the end of World War II. Then The World Health Organization (WHO) extended the meaning of health and involved the ideas of physical, psychological, environmental and social well-being (Ruzevicius, 2014). Therefore, the quality of life is treated as “individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (Programme on mental health, 1998).

Studies on the subject literature point out the diversity of the definitions of the concept of quality of life. According to M. Abrams (1973) quality of life is “the degree of satisfaction or dissatisfaction felt by people with various aspects of their lives”. A broad definition of quality of life is presented by D.A. Revicki and co-workers (2000). They define quality of life as a comprehensive range of human experiences linked to one's overall well-being. It indicates value based on subjective functioning in comparison with personal expectations and is determined by subjective perceptions, experiences and states. Moreover, they underline that “quality of life, by its very nature, is idiosyncratic to the individual, but intuitively meaningful and understandable to most people”. In the opinion of Diener et al. (1999), the concept of quality of life mostly contains how an individual measures the „goodness” of

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numerous aspects of their lives. These assessments include one's disposition, emotional reactions to life occurrences, sense of life fulfilment and satisfaction, and satisfaction with personal relationships and work. Following this trend, Arsovski et al. (2016) emphasize that the quality of life has two components:

- objective conditions which are explained as the resources that a person has, including the real opportunities to use these resources to meet one's needs,
- Subjective experience of one's capabilities and the fulfilment of these needs.

The main aim of the article is to compare different quality of life variables in Poland and Russia. For the purpose of this paper, it was assumed that the quality of life refers to subjective experience of one's capabilities and the fulfilment of one's needs among students.

For many young people, the time from the end of adolescence to about 25 years is a key period of achievement, experimentation and change (Chisholm & Hurrelmann, 1995). During this period there are many opportunities related to work, love or exploration of the world (Rindfuss, 1991). Also, the changes regarding the delayed age of getting married and extending the period of education by young people (Arnett & Taber, 1994) encouraged Arnett (2000) to present a new concept of development - the so-called emerging adulthood. It distinguishes three main areas showing the separateness of the period of entering adulthood from teenage age or adulthood. These are: demographics, perception of yourself, identity shaping.

Demographic differentiation based on the inability to predict the situation of an individual only on the basis of age can be seen, for example, in the way of life (alone, with parents), frequent removals, large opportunities or lack of obligations under the statute. This is what distinguishes people at

the stage of entering into adulthood from children (living with their parents and their dependence on them) and adults (permanent residence, obligations resulting from the status or commitment at work) who cannot be characterized by such a high dynamics of change.

Perceiving of self also distinguishes the emerging adulthood from childhood and adulthood. Young people do not call themselves children but they also do not fully define themselves as adults. They remain as if suspended between these two states.

The research conducted by Arnett (1920) on a group of 519 Americans. One of the asked questions was a straightforward question: "Do you think that you have reached adulthood?" The results are presented in four age groups: 12 - 17 years, 18 - 25 years, 26 - 35 years and 36 - 55 years. People aged 18 - 25 mostly chose the answer "yes and no" (nearly 60%). Less than 40% of them chose the answer "no", and only about 18% answered "yes". In the group of 18 - 25 years, the largest number of people from all groups chose the answer "yes and no". 40% chose the answer "yes". The answers "not" were negligible. In the group of people aged 26-35, the number of people choosing the answer "yes and no" is definitely lower than in the two previous ones (about 32%). Much more of them claim that they have already reached adulthood (about 65%). This analysis shows that age 18 - 25 is the age in which people are suspended between growing up and adulthood. Most of them are not sure whether they had already reached adulthood. In the next age group this value is definitely decreasing.

According to Arnett (2000), shaping identity in the period of emerging adulthood takes place within three main areas: love, work and views. Although the beginnings of these processes are already present in the adolescence period, the main changes occur just in the period of entering adulthood 18-25 years.

In addition to the above-mentioned three main areas characterizing the period of emerging adulthood, there are also other areas related to age-specific behaviours of young people. These include examples:

- 1) Taking risky behaviours, which include unsecured sex, using narcotics and dangerous behaviour on the road, speeding or driving under the influence of intoxicants.
- 2) Changing the relationship with parents which consist in moving from the relationship of opposition typical of the teenage period to the parents for a more partner relationship.

The concept of rising adulthood allows young people to discover and choose the best way to grow in adulthood. This does not mean, however, that there are no changes that are important for human development at a later stage.

Based on those evidences it seems appropriate to analyse the quality of life of students, who are in fact in the age of emerging adulthood, using a tailor-made questionnaire that would be more suitable rather than using questionnaires made for kids or adults.

2. Methodology

2.1. Hypothesis

For the current research the following hypotheses were proposed:

H0: Students from Poland and Russia assess their quality of life on the same level.

H1: There are no significant differences between mean values of dimensions of QoL in responses of Polish students.

H2: There are no significant differences between mean values of dimensions of QoL in responses of Russian students.

H3: If students are satisfied with their student lives, they are satisfied with their life in comparison with others.

H4: Students living with parents assess their QoL lower than students living out of a family home.

H5: If a person has low scores in the past week events he or she focuses on neighbourhood.

H6: If a person has high scores in relations he or she has also high scores in comparison with others.

2.2. Data collection

The study was based on primary data of quantitative and qualitative nature. They were analysed by the usage of single, double and multidimensional statistics. Data used in the research originate from the data collection obtained by the researchers themselves. The research based questionnaire was conducted as a CSAQ (Computerized Self – Administered Questionnaire), a computer based questionnaire where respondents were giving their answers directly. It was possible due to usage of G-Suit package.

2.3. Procedure

The data was collected on two universities: Cracow University of Economics and Saint - Petersburg State University of Economics between April and October of 2018. The questionnaire was prepared based on critical analysis of the literature related to the general topic of quality of life. The questionnaire of quality of life of students consists of 79 items structured in 11 different dimensions of the quality of life construct. It is important to note that the questionnaire was based on a self-descriptive method. The task of the students was to assess their quality of life by assessing satisfaction or the level of application of a given item to their own state. It was conducted on a 5-point Likert Scale.

2.4. Analytical procedure

It is essential to the following article to explain the difference between Likert Scale and Likert-Type Scale. The original scale created by Likert used a series of questions with the answers possibility from Strongly approve (1) to Strongly disapprove (5). After Likert (1932) developed his procedure for measuring attitudinal scale, his achievement was implemented into various fields of science. This common trend caused some problems with improper analysis of individual questions rather than groups of questions. Likert-Type Scale is identified (Clason & Dormody, 1994) as a usage of single questions that uses the Likert response alternatives. Multiple questions may be used in the data gathering tool like that but there is no attempt from the researcher to combine the received answers into a composite scale (Bone & Bone, 2012). This attempt of a researcher to create a composite scale is the main point distinguishing Likert Scale and Likert-Type Scale. In Likert Scale, multiple questions are being asked because a single question cannot fully capture the concept, especially when it is a less concrete one (Rickards et al., 2012). Based on those evidences it is reasonable to treat and analyse Likert Scale not as an ordinal one (such as Likert-Type Scale) but as an interval scale because the scale is created by calculating a composite score out of few Likert-Type Scale items. Since it is treated as an interval scale, it is possible to use such statistical tools as MANOVA, ANOVA or Pearson's coefficient.

MANOVA will be used to verify H0 and H4. The procedure of verification will be based on MANOVA test with Wilk's Lambda distribution. Later ANOVA test will be conducted for each dimension to check whether there is a difference between this particular one. An alpha significance is established on the level of 0.

ANOVA will be used to verify H1 and H2. First the assumption of the homogeneity of variances will be checked. Later The ANOVA test with Bonferroni correction will be used to indicate the differences between the dimensions of quality of life.

It is important to indicate that both ANOVA and MANOVA are resistant tests for not fulfilling the basic assumption of homogeneity of variance (Hsu, 1938; Box, 1954; Lindman, 1974). Even if the assumption is broken, the ANOVA and MANOVA test may still be conducted in this matter.

Pearson's coefficient will be used to verify H3, H5 and H6. It is justified to use Pearson's correlation rather than non-parametric test because the assumption was made to treat the Likert Scale as the interval scale.

2.5. Characteristic of a research sample

In the conducted research there were 311 students (252 from Poland and 69 from Russia) taking part in the research among which 66 were men (21,2%) and 244 were women (78,5%). The age is described as follows: $M=22,8$; $SD=3,4$.

3. Results

Verification of H0: Students from Poland and Russia assess their quality of life on the same level.

The mean values of QoL dimensions of QoL from Poland and Russia are presented in table 1.

Six dimensions are being scored higher by Polish rather than Russian students. Those are personal well-being, student life, neighbourhood, past week, relations and important events. The five dimensions that were scored higher by Russian students rather than their Polish peers are: coping with life, self-esteem, expectations, the person you are, and comparison to others.

Table 1. Group Statistics - QoL dimensions

	Country	N	Mean	Std. Deviation
Personal Well-Being	Poland	252	3,6301	,5690
	Russia	58	3,1513	,7867
Student life	Poland	252	3,3193	,6255
	Russia	58	3,2006	,7236
Neighbourhood	Poland	252	3,2018	,6619
	Russia	58	3,0591	,8475
Past week	Poland	252	2,7353	,8760
	Russia	58	2,5066	,7690
Relationship	Poland	252	2,5675	1,0215
	Russia	58	2,3276	,8050
Important events	Poland	252	3,1786	1,5525
	Russia	58	2,9483	1,4070
Coping with life	Poland	252	3,0437	,3909
	Russia	58	3,2490	,4048
Self -esteem	Poland	252	3,1710	,3392
	Russia	58	3,3207	,3503
Expectations	Poland	252	3,5741	,8943
	Russia	58	3,8103	,8426
The person you are	Poland	252	3,1052	,4478
	Russia	58	3,1638	,4382
Comparison to others	Poland	252	2,9983	,6441
	Russia	58	3,2857	,4102

To check if there are significant differences between countries, the MANOVA test was conducted. There was a significant difference between Polish and Russian students when considered jointly all 11 dimensions of quality of life. Wilk's $L=,751$,

$F(11,298)=8,970$, $p<0,001$. A separate ANOVA was conducted for each dependant variable, with each ANOVA evaluated at a significance alpha level of 0,05. The results of pair wise comparison are presented in table 2.

Table 2. Pair wise comparison of countries within dimensions of QoL.

Dependent Variable	(I) 1. Country	(J) 1. Country	Mean Difference (I-J)	Significance (p)
Personal Well-Being	Poland	Russia	,479*	,000
Student life	Poland	Russia	,119	,207
Neighbourhood	Poland	Russia	,143	,163
Past week	Poland	Russia	,229	,068
Relationship	Poland	Russia	,240	,096
Important events	Poland	Russia	,230	,301
Coping with life	Poland	Russia	-,205*	,000
Self-esteem	Poland	Russia	-,150*	,003
Expectations	Poland	Russia	-,236	,068
The person you are	Poland	Russia	-,059	,367
Comparison to others	Poland	Russia	-,287*	,001

As it was assumed before, the significance level 0,05 was established. All dimensions of quality of life that scored lower than 0,05 should be considered as different. It is then appropriate to say that:

- 1) students from Poland assess their personal lives better than students from Russia ($p < 0,001$) and the mean difference between their assessment is 0,479.
- 2) students from Russia assess their coping with life better than students from Poland ($p < 0,001$) and the mean difference between their assessment is 0,205.
- 3) students from Russia assess their self-esteem better than students

from Poland ($p = 0,003$) and the mean difference between their assessment is 0,150.

- 4) students from Russia compare to others higher than students from Poland ($p = 0,001$) and the mean difference between their assessment is 0,287.

Based on the results of MANOVA test the H_0 is verified partially positive.

Verification of H_1 : There are no significant differences between mean values of dimensions of QoL in the responses of Polish students.

The results of the descriptive statistics of Polish students are shown in table 3.

Table 3. Descriptive Statistics of QoL dimensions – Poland

	N	Minimum	Maximum	Mean (M)	Std. Deviation (SD)
Personal Well-Being	252	2	5	3,6301	,5690
Expectations	252	1	5	3,5741	,8943
Student life	252	1	5	3,3193	,6255
Neighbourhood	252	1	5	3,2018	,6619
Important events	252	0	5	3,1786	1,5525
Self-esteem	252	2	4	3,1710	,3392
The person you are	252	2	5	3,1052	,4478
Coping with life	252	2	4	3,0437	,3909
Comparison to others	252	1	5	2,9983	,6441
Past week	252	1	5	2,7353	,8760
Relationship	252	1	5	2,5675	1,0215
Valid N (list wise)	252				

Personal well-being is the highest marked dimension of quality of life in Poland with a mean value of $M = 3,63$, and a standard deviation equal to $SD = ,5690$. Expectations mean is also above 3,5 ($M = 3,57$, $SD = ,8943$). The lowest scored dimensions are comparison to others, past week and relationship respectively. All of them are being scored on the level below 3, which is the mode value. The results are also shown in figure 1. The analysis of the differences between each of the dimensions of QoL was conducted with the use of ANOVA. The test of equality of variance resulted in significance of $p < 0,0001$ which means that

the assumption of the equality of variances was broken. The result of ANOVA is equal to $F(4,250) = 38,581$, $p < 0,0001$ which indicates that the statistically significant difference between the dimensions of QoL. The results of Bonferroni test indicates that there are no statistically significant differences ($p < 0,05$) between personal well-being and expectations, student life, neighbourhood, important events and self-esteem, the person you are, coping with life and comparison to others and between past week and relationship.

H_1 is verified partially positive.

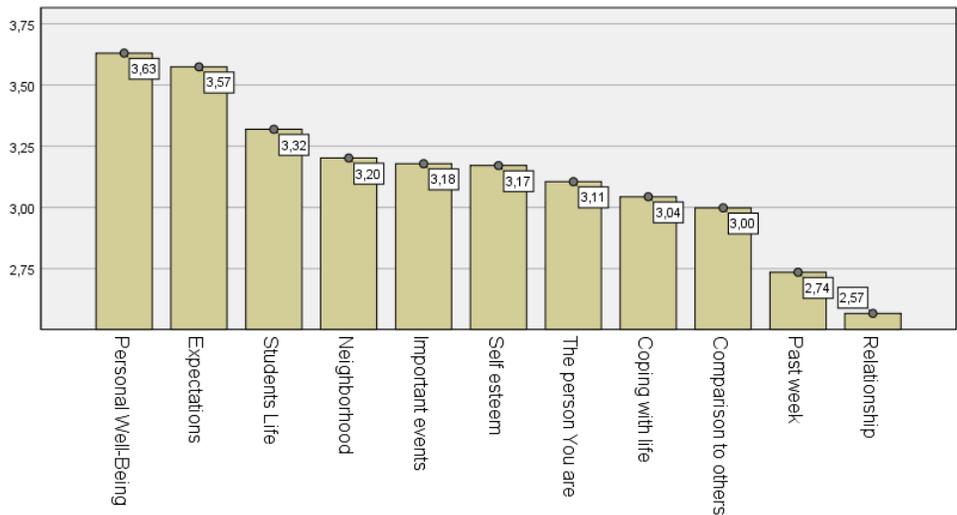


Figure 1. Mean values of QoL dimensions – Poland

Verification of H2: There are no significant differences between dimensions of quality of life in responses of Russian students.

The results of the descriptive statistics of Russian students are presented in table 4.

Table 4. Descriptive Statistics of QoL dimensions – Russia

	N	Minimum	Maximum	Mean (M)	Std. Deviation (SD)
Expectations	58	2	5	3,8103	,8426
Self-esteem	58	2	4	3,3207	,3503
Comparison to others	58	2	4	3,2857	,4102
Coping with life	58	2	4	3,2490	,4048
Student life	58	2	5	3,2006	,7236
The person you are	58	2	4	3,1638	,4382
Personal Well-Being	58	1	5	3,1513	,7867
Neighbourhood	58	1	5	3,0591	,8475
Important events	58	0	5	2,9483	1,4070
Past week	58	1	5	2,5066	,7690
Relationship	58	1	4	2,3276	,8050
Valid N (list wise)	58				

Expectations are the highest marked dimension of quality of life in Russia with a mean value of $M=3,81$, and standard deviation equal to $SD=,8426$. The differences between next dimensions such as self-esteem

($M=3,32$, $SD=,3505$), comparison to others ($M=3,29$, $SD=,4102$), coping with life ($M=3,25$, $SD=,4048$) are barely visible. The lowest scored dimensions are important events, past week and relationship

respectively. All of them are being scored on the level below 3, which is the mode value.

The results are also shown in figure 2.

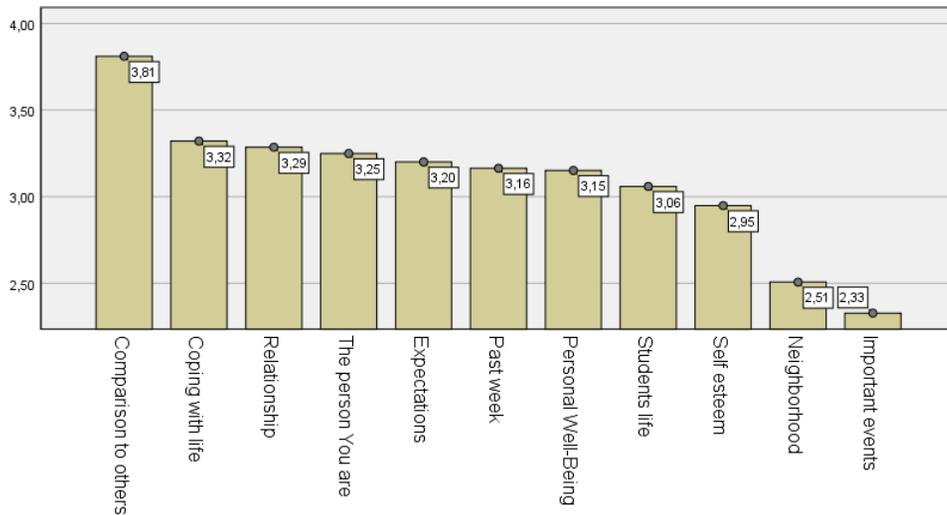


Figure 2. Mean values of QoL dimensions – Russia

ANOVA test was conducted to analyse the differences between each of the dimensions of QoL. The test of equality of variance resulted in significance of $p < 0,0001$, which means that the assumption of equality of variances was broken. The result of ANOVA is equal to $F(4,93)=38,581$, $p < 0,0001$ which indicates statistically significant difference between the dimensions of QoL. The results of Bonferroni test indicates that there are statistically significant differences ($p < 0.05$) between comparison to others and coping with life, relationship, the person you are, expectations, past week, student life and self-esteem, the mentioned above and neighbourhood and important events.

H2 is verified partially positive.

Verification of H3: If students are satisfied with their lives, they are satisfied with their student life in comparison with others.

The Pearson’s Correlation test was used to

verify hypothesis 3. Results are shown in table 5.

Table 5. Pearson’s Correlation for Student life and Comparison to others

		Comparison to others
Student life	Pearson’s Correlation	,338
	Signific.	,000
	N	310

The correlation is significant but on a weak level (0,338).

H3 is verified positively.

Verification of H4: Students living with parents assess their QoL lower than students living out of a family home.

The mean values of QoL dimensions from people living alone and with parents are presented in table 6.

Table 6. QoL dimensions for people living alone and with parents

	Accommodation	N	Mean	Std. Deviation	Std. Error Mean
Personal Well-Being	Alone	123	3,5637	,6058	,0546
	With parents	179	3,5270	,6689	,0500
Student life	Alone	123	3,2816	,5952	,0537
	With parents	179	3,3073	,6823	,0510
Neighbourhood	Alone	123	3,1556	,7312	,0659
	With parents	179	3,2067	,6813	,0509
Past week	Alone	123	2,7486	,8458	,0763
	With parents	179	2,6558	,8766	,0655
Relationship	Alone	123	2,6130	,9894	,0892
	With parents	179	2,4570	,9881	,0739
Important events	Alone	123	3,0976	1,5440	,1392
	With parents	179	3,1899	1,4831	,1109
Coping with life	Alone	123	3,0370	,3573	,0322
	With parents	179	3,1080	,4315	,0323
Self-esteem	Alone	123	3,1715	,3496	,0315
	With parents	179	3,2184	,3421	,0256
Expectations	Alone	123	3,4146	,9167	,0827
	With parents	179	3,7449	,8473	,0633
The person you are	Alone	123	3,1118	,4449	,0401
	With parents	179	3,1006	,4367	,0326
Comparison to others	Alone	123	2,9001	,5994	,0540
	With parents	179	3,1492	,6057	,0453

Four dimensions are being scored higher by people living alone than by people living with their parents. Those are personal well-being, past week, relationship, and the person you are. Other dimensions are scored higher by people living with parents.

To check if there are significant differences between countries the MANOVA test was conducted. There was a significant

difference between students living alone and students living with their parents considered jointly all 11 dimensions of quality of life. Wilk's $\Lambda = .928$, $F(11,290) = 2,052$, $p = 0,024$. A separate ANOVA was conducted for each dependant variable, with each ANOVA evaluated at a significance alpha level of 0,05. The results of pair ways comparison are presented in table 7.

Table 7. T-Student's comparison

Dependent Variable	(I) Accommodation	(J) Accommodation	Mean Difference (I-J)	Significance (p)
Personal Well-Being	Alone	With parents	,037	,627
Student life	Alone	With parents	-,026	,736
Neighbourhood	Alone	With parents	-,051	,535
Past week	Alone	With parents	,093	,360
Relationship	Alone	With parents	,156	,179
Important events	Alone	With parents	-,092	,601
Coping with life	Alone	With parents	-,071	,134
Self-esteem	Alone	With parents	-,047	,247
Expectations	Alone	With parents	-,330*	,001
The person you are	Alone	With parents	,011	,828
Comparison to others	Alone	With parents	-,249*	,000

As it was assumed before the significance level 0,05 was established. All dimensions of quality of life that scored lower than 0,05 should be considered as different. It is then appropriate to say that:

- 1) students living alone assess their expectations lower than students living with their parents ($p=0,001$) and the mean difference between their assessment is 0,330.
- 2) student living alone compare their life to the life of others lower than students living with their parents ($p<0,001$) and the mean difference between their assessment is 0,249.

H4 is verified negatively.

Verification of H5: If a person has low scores in the past week events he focuses on neighbourhood.

Table 8. Pearson’s Correlation for Neighbourhood and Past Week

		Past week
Neighbourhood	Pearson’s Correlation	-,190**
	Signific.	,000
	N	310

The conducted analysis shows that the correlation is significant $p<0,0001$, but the strength of it is weak $r=-0,190$.

H5 is verified positively.

Verification of H6: If a person has high scores in relations he or she has also high scores in comparison with others.

Table 9. Pearson’s Correlation for relationship and Comparison to others

		Relation
Comparison to others	Pearson’s Correlation	,720
	Signific.	,000
	N	62

The conducted analysis shows that the correlation is significant $p<0,0001$ and the strength of it is strong $r=0,720$.

H6 is verified positively.

4. Conclusion and future work

Our findings mainly confirm the main hypothesis (H0) about the homogeneity of student’s self-assessment of their quality of life. There are no significant differences between dimensions of quality of life in the responses of Polish and Russian students.

There are several reasons to explain the results.

First of all, Cracow and Saint-Petersburg are attractive cities for foreign students providing new possibilities to create new acquaintances especially in the case of undergraduates living in a dormitory. Thus one of the high developed cities in Russia as Kazan provides good quality of living in students’ dormitory creating possibilities to strengthen ties among young people by providing special facilities such as sports infrastructure (Сушков & Панов, 2016). However, this fact cannot overcome the quality of life at home - preferably because of an easy way of living and the lack of necessity to maintain the household.

Secondly, the period of emerging adulthood opens new possibilities in building weak ties. Thus, one of the important dimensions of relation is being implemented by Mark Granovetter in his pioneer work. He distinguished the meaning of the strength of weak ties as the “combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services” (Granovetter, 1973). Referring to our findings, students who have good relations and managed past week events, assessed the meaning of neighbourhood as high. Consequently, young people use weak ties to cope with their daily routines including problems. This point is also related with our hypothesis according to which the students living in a dormitory better manage past week events than the students living alone.

Thirdly, there are some similarities and differences in findings between the responses of Polish and Russian students.

For the future work it is advisable to ensure the balance between two samples. The questionnaire that has been used for the research included reverse scales in few items. This could induce some misunderstanding and problems with indicating the correct answer.

However, it is important to note that the globalization may have a greater impact than

we can imagine and that there are more similarities between new generations in different countries nowadays than in the past. The analysis of additional surveys in the future will provide new observations of this phenomenon.

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