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## EVALUATION OF QUALITY OF LIFE OF STUDENTS

**Article info:**  
Received 22.11.2015  
Accepted 24.05.2016

UDC – 638.124.8  
DOI – 10.18421/IJQR10.04-11

**Abstract:** *Quality of life is a theme that is becoming more and more prominent. Every man can express his opinion about the quality of their life, which allows a realistic assessment of the quality of life of a particular population on the basis of subjective feelings of its members. Therefore, in this study through surveys and questionnaires with more than 80 questions from 11 subject areas is attempted to form a picture of the quality of life of the student population of the University of Montenegro (UM). The survey covered 14 units and 60 university students and the results of this survey have provided answers to some key questions by which the guidelines for raising the quality of life of students were obtained.*

**Keywords:** *Quality, Quality of Life, Students, Vulnerability, Resilience, Well-Being*

### 1. Introduction

The term "quality of life" is recent date. In fact, the first time was mentioned in 1920 in order to intensify began using since 1970. It is not easy to define the quality of life. Throughout the history the definitions but also ways of measuring the quality of life significantly changed. In the middle of the last century, the quality of life is mainly explored from an economic point of view because the quality of life was defined as living standard. An increase of living standards lead researches to focus on satisfying the personal and social needs which then went to be subsequently distinguished between subjective and objective indicators of quality of life. During 70s research on the theme of quality of life focused mainly on subjective indicators.

Quality of life can therefore be evaluated from both the objective and the subjective

aspects. The certain organizations that assess the quality of life of people in a particular area are dealing with an objective assessment of the quality of life. The health, education and standard of citizens in general is then examined and statistical results which serve as parameter are obtained for comparison and improvement of the quality of life in certain areas. Significant parameters of this type include Quality of Life Index (QOLI) and the Human Development Index (HDI). In the literature generally two approaches to the analysis of the quality of life can be separated, and that are: Scandinavian, which takes into account objective indicators of quality of life for society as a whole and the US where they emphasize subjective indicators of the quality of life (Vuletić, 2011).

Today a great number of studies on this subject is characterized by focusing on individual, because the quality of human life actually depends on its perception of the quality of their own lives. The reason for this lies in the fact that the statistics obtained on

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the basis of an objective assessment of the quality of life can be an indicator of one's personal happiness. The emotions do not arise in a vacuum, do not occur by themselves, they are inseparable from things that make them feel, as well as being is inseparable from life situation in which it feels a given feeling (Nikolic and Pecujlija, 2012). Many spheres of human life are pressed with prejudice and burdened by inadequate attitude towards the problem and its manifestations (Nikolic and Pecujlija, 2015). Therefore, the subjective aspect of quality of life in its assessment is particularly relevant, as well as vulnerability, resilience and impact of ICT, and quality of higher education.

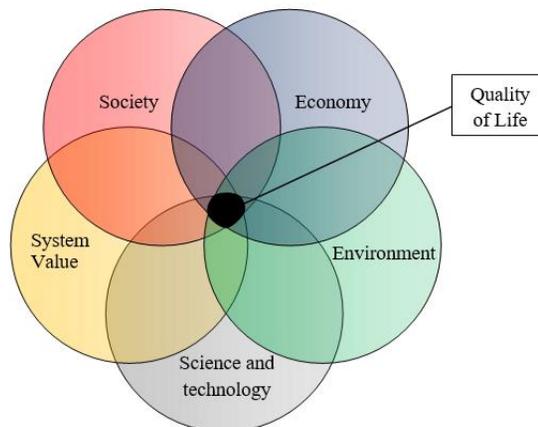
In this paper, attention will be focused on the student population and assessment of their quality of life based on subjective assessments, which will be determined through a survey.

## 2. Quality of life philosophy

Each man has a personal impression of his quality of life so it is very difficult to give a general definition of quality of life. Without going into all these definitions we only emphasize the WHO (*World health Organization*) definition of quality of life that is perhaps most comprehensive:

*"Quality of life is defined as the perception of individuals about their own position in life in the context of culture and value systems in which they live, as well as to their goals, expectations, standards and interests. This is a broad concept which covers the physical health of individuals, psychological status, material independence, social relations and their relations to the significant environmental characteristics."* (WHO)

In the literature, there are several different models for assessment of quality of life. In addition to general models of quality of life, there are models for specific groups of people (athletes, sick people, people with disabilities...). They all include a large number of different indicators that can give an answer to the question of quality of life of the test group. All models include assessment of at least three dimensions (economy, society and the environment). However, the dimension of science and technology is increasingly beginning to occupy an important place, so that the indicators for evaluating the quality of life can be grouped into four categories. Also, in recent times there is a common approach that some of these categories can further be divided into sub-categories (social category of society and value system that encompasses tradition, religion, culture and civilization), as shown in Figure 1 (Milivojević *et al.*, 2014).



**Figure 1.** Dimensions that define Quality of Life

Some of the factors that can be considered under these dimensions are given in Table 1 (Jasic and Kaludjerović, 2015).

Table 1. Quality of Life indicators

<b>Economic indicators</b>	<b>Science and tech. indicators</b>	<b>System value</b>	<b>Society indicators</b>	<b>Environment indicators</b>
Business Regional competitiveness Poverty Different (employment) Employment (total) Finances Income Resource/resource usage...	Science potential Automatization and robotization Communications and informatics Recycling technologies Creativity and knowledge Inovations/eko inovations...	Tradition Religion Culture Civilization	Population Children Education and lifelong learning Health Settlements and Housing Transportation Connection Diversity Literacy ...	Air Awareness of the importance of environment Biodiversity Fish Global warming Underground waters Land use Soil pollution...

The students are healthiest population belonging to the society. Yet it is also a very sensitive population, because they are in the period of adaptation to the new needs of internal and external environment, so the quality of life of this population should always be separately analyzed (Marčinko *et al.*, 2011). In fact, the challenges and opportunities that students encounter are numerous and specific in many aspects because in this period of life, many for the first time face a variety of challenges in order to adapt to new conditions of life which necessarily require changes in individuals. All this of course is linked to the quality of life of the individual and requires deeper analysis (Milivojević *et al.*, 2011).

The quality of life of students depends on the overall factors. Technology, especially ICT represents one of the most significant factors. In papers from literature are analyzed mobile and e-learning concepts as concepts which will be increasingly used in future (Kalinic *et al.*, 2014; Kalinic *et al.*, 2011; Stefanovic *et al.*, 2010). According to Z. Kalinic mobile learning has direct impact on quality, from the aspect of communication speed, benefits from using free time for learning, expansion of

educational content, possibilities for assessment etc. On the other hand process of high education is followed by certain risks, vulnerability and resilience which are related to organizations, information system in it and supply chains in which high education organization can be found. This is published in papers (Arsovski *et al.*, 2015; Arsovski *et al.*, 2012; Arsovski *et al.*, 2012; Aleksić *et al.*, 2014; Aleksic *et al.*, 2013). In order to create effective system of high education it is necessary to apply certain methods of optimization. In papers (Nestic *et al.*, 2015; Rankovic *et al.*, 2012; Rankovic *et al.*, 2012; Rankovic *et al.*, 2014; Stefanović *et al.*, 2015) is pointed out the application of generic algorithm methods, multicriteria optimization and simulation.

Quality of life also relates to other aspects of process quality and organization in whole. In papers (Arsovski *et al.*, 2008; Arsovski *et al.*, 2012; Pavlovic *et al.*, 2011) aspects such as development and simulation of special processes were analyzed from aspect of quality of life.

Quality of life of students depends on many contingency factors too, which are related to sustainability of high education

organizations. Those are level of employee satisfaction, student economic situation, number of students per teacher, level of ICT support etc.

### 3. Analysis of the quality of life of students at university of montenegro

Surveying student population was conducted in order to analyze the quality of life of students at University of Montenegro (UM). The survey was conducted by applying a questionnaire containing questions in the following areas:

- Subjective well-being
- Student life
- Neighborhood
- Last week
- Relationships
- Events in life
- Dealing with life
- More about yourself
- Expectations
- Person type
- Life in relation to the available aspects

A total of 60 students were surveyed from the selected university units as shown in Figure 2.

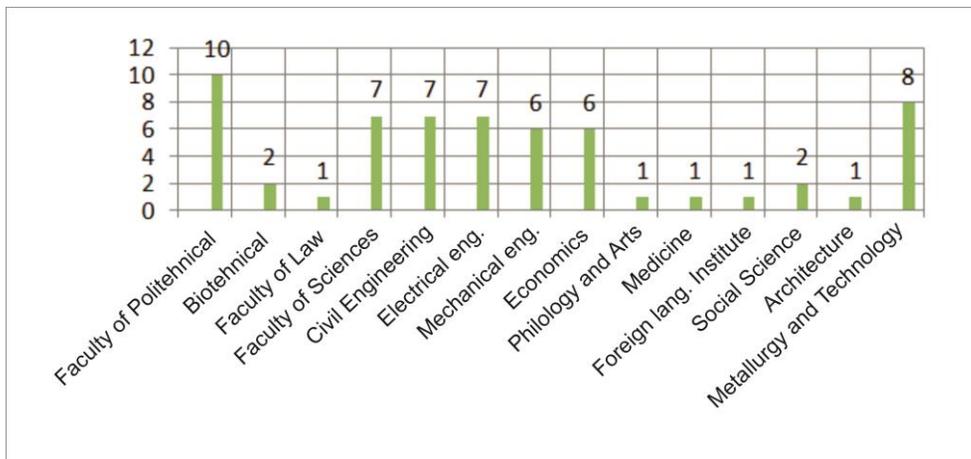


Figure 2. Distribution of the surveyed students at university units

Ratio of the surveyed men and women is 26:34. The questions in the questionnaire are generally defined to be answered given

grades ranging 0 - 10. Distribution of the survey per years of study is shown in Figure 3.

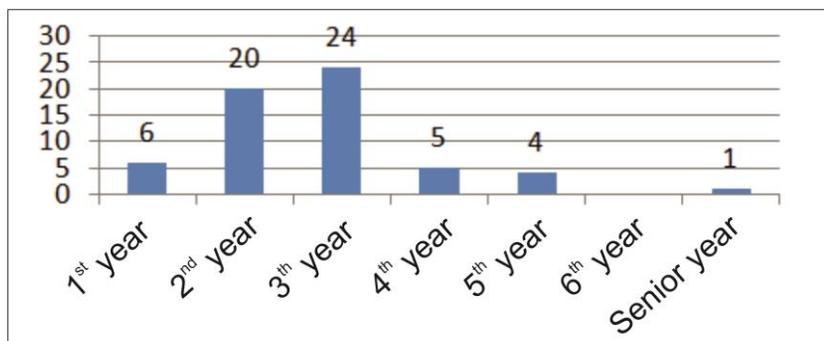


Figure 3. Distribution of the surveyed students per years of study

In the following, from certain areas of the questionnaire, responses of the surveyed students on some of the key issues will be shown. Selected are the areas that define the social life of students and their perception of quality of life.

### 3.1. Subjective well-being

The questions are related to:

- 1) Satisfaction with life in general
- 2) Satisfaction with living standard
- 3) Satisfaction with what has been achieved in life

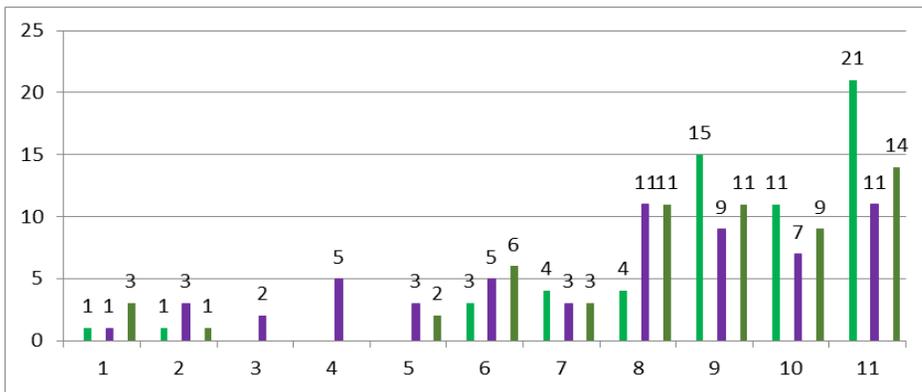


Figure 4. Subjective well-being distribution

The largest number of students on key issues in the field of subjective well-being have given high marks, rating above 7. In fact on the question of life satisfaction, 78.3 of them have given marks 8, 9 and 10. When it comes to standard of living situation is somewhat worse because less than half of them (45%) gave marks 8, 9 and 10. Better situation is in matters pertaining to the

satisfaction achieved. In fact, 56% of them rated this category with 8, 9 and 10.

### 3.2. Student life

The questions are related to:

- 1) Satisfaction with students life
- 2) Satisfaction with life at university
- 3) Satisfaction of control over student life

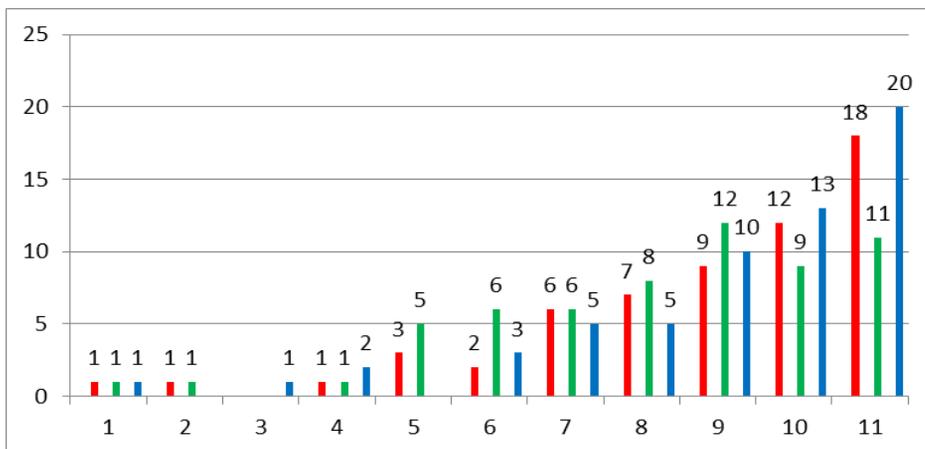


Figure 5. Distribution of students satisfaction

In total 65% of students showed great satisfaction with student life (grades 8, 9 and 10). "Satisfaction with life at university" is something worse (50% of them gave marks 8, 9 and 10), while "Satisfaction of control over student life" is very well rated (71% of them gave marks 8, 9 and 10).

### 3.3. Neighborhood

Questions are related to:

- 1) Satisfaction with life in the neighborhood
- 2) Satisfaction level of trust in the neighborhood
- 3) Satisfaction of cooperation in the neighborhood

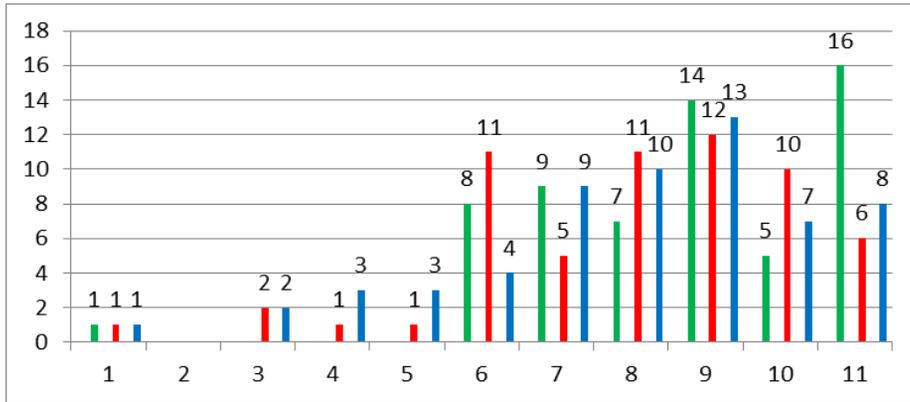


Figure 6. Distribution of neighborhood satisfaction

Neighborhood satisfaction is not rated by any particularly high marks. Satisfaction with life in the neighborhood received highest ratings. 58.3% of them gave marks 8, 9 and 10, 46.6% of respondents expressed satisfaction with the high level of trust in the neighborhood as well as cooperation in the neighborhood (grades 8, 9 and 10).

### 3.4. Relationships

Questions are related to:

- 1) How often have you felt lonely
- 2) How often did you feel isolated from others
- 3) How often have you felt that others are around you but not with you

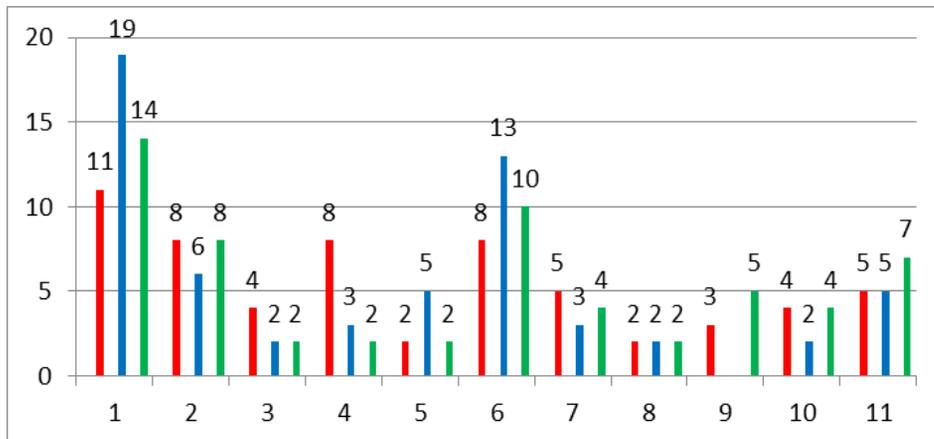


Figure 7. Distribution of students relationships

Students relationships are rated as very solid. A greater number of students gave the best score on the three key issues (Figure 7). Specifically, 38.3% of them gave their assessment (0-never, 1 and 2) to the question on the frequency of feelings of loneliness. On the question of the frequency of feelings of isolation 45% has given marks (0, 1 and 2), while 40% gave the same marks on the question of mental absence of people from the region. However, the situation in this field is a little confusing because not a small number of students at these issues has given

the average mean grades but also very low (8, 9 and 10) so that for the overall conclusion on this subject it is still needed a larger sample of respondents.

### 3.5. Expectations

Questions are related to:

- 1) I expect more good than bad things to happen
- 2) I am optimistic about the future
- 3) In uncertain times expect the best

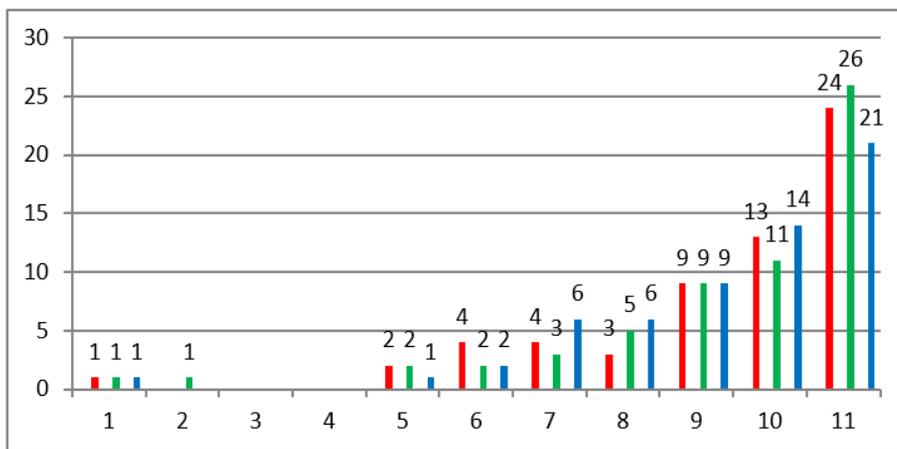


Fig. 8. Distribution of students expectations

This issue is of particular importance for analysis of the results, bearing in mind the importance of how surveyed students have an optimistic attitude towards the future is important for answers to these questions. On all three questions concerning expectations for the future more than 73% of respondents gave a score 8, 9 and 10.

## 5. Conclusions

Objective assessment of quality of life, which based on statistical models, specialized institutions provide a variety of, often can not provide the answer to the question of subjective well-being and satisfaction of individuals, nor to provide a realistic and complete picture of the quality

of life especially when it comes to some specific populations like the students one. Therefore, the subjective assessment of the quality of life obtained on the basis of a representative sample of a population is competent to draw a picture of the quality of life of a population.

The survey that was conducted on UM included 14 university units. Although the sample of respondents could be higher obtained is a very interesting picture of the quality of life of the student population. In fact, most students expressed quite satisfaction with life, standard of living and with the results achieved in life and student life as a whole. Satisfaction with life in the neighborhood is not rated with so high grades but still is at a satisfactory level. A

little confusing situation is obtained in the field of relationships. In fact, certain, not a small number of students (over 38%), gave very high marks to the question of mutual relations and of sociality as a number of them gave very low but also the average score. So the final conclusion on this subject, however, requires a larger sample in order to provide a greater degree of objectivity and reliability of results. What is commendable and certainly very important for the relevance of the results is the fact that the

majority of students expressed an optimistic attitude towards the future and at the same time self-described as an optimistic person.

On the basis of the previous analysis can be concluded that UM students are generally satisfied with the quality of life, however, the sample of surveyed should be increased in order to get more reliable and objective results in order to compare it with the results of assessment of student populations of neighboring countries.

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