

Differences in Life Satisfaction in Relation to Sense of Coherence of Future Teachers

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Abstract: This paper is composed as a study whose aim is to research the relation between the sense for integrity and life satisfaction. Sense of Coherence was chosen as one of the many theories of resourcefulness, or control where also belongs the theory Locus of Control, Self-Efficacy, Hardiness, Resilience, Casual Attributions or Perceived Control. Life satisfaction is perceived as one of the indicators of life quality coming from subjective hierarchy of life needs and perception of their saturation. Research in this area was executed using a sample of 320 university students of Constantine the Philosopher University in Nitra. We assumed that H1: there exists a difference in life satisfaction in relation to comprehensibility; H2: there exists a difference in life satisfaction in relation to meaningfulness; H3: there exists a difference in life satisfaction in relation to manageability. All these hypotheses are accepted based on statistical inference.

Key words: resourcefulness, sense of coherence, life satisfaction

1. Introduction

Every person has the ambition, desire or need to be happy. The impression of subjective happiness is however never derived from objective indicators because these are always relative and dependant on subjective interpretation. At the same time we can state that experiencing happiness is dependant from freedom and attitude towards it. Maybe we are not able to clearly define what freedom is but we certainly know that we want to choose what is important for us and we want to draw nearer to our dreamt-of ideals, we want to venture that our behaviour leads to desired results, that we are not dependant from good will of other people and that the centre of our evaluation and life rests in ourselves. About all these desires which are inherent to all the people (though some people don't know about it) are also psychological concepts of the sense for integrity and life satisfaction. We were interested if and how are these variables related. We were specifically interested in this in relation to people who actively work with their own identity, who solve who they are and who they want to be.

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2. Review of the Literature

This section offers a review of the literature related to the theories of the resourcefulness, especially sense of coherence, and life satisfaction. This section leads to the relation statement between these variables and formulation of the hypothesis about the relation between sense of coherence and life satisfaction.

2.1 Theories of the Resourcefulness

There are a lot of theories which are centred on perception of one's own ability to handle the problematic situations. We can numerate them in hundreds. It is difficult to choose clear representatives and do not forget about others which are significant, too.

These theories can be named as theories of control, theories of self-efficacy or theories of attributions. We assume that in this context the adequate name would be the theories of resourcefulness.

The first effort to solve this problem conceptually and to acquire the empirical data is Rotter's theory of control which is derived from the theory of the social learning. According to Rotter (1954), the behaviour is predictable based on men's/women's values, expectations and situations in which he/she is placed. Rotter has introduced the concept "locus of control" (LOC). He defined two extreme opposites in this concept (internalism and externalism) and has characterized them as follows. Generalized expectation of internal control refers to the perception of the events (positive or negative) as consequences of one's own activity and so as being under the personal control. Generalized expectation of external control refers to perception of the events (positive or negative) as uncontingent with one's own behavior and so outside of own's personal control.

The problem of LOC was the centre of interest within the works of many authors. Levenson (1981) and Lefcourt (1981) belong to them. Their works lead to distinguishing four sets of attributions: ability, effort, powerful others and luck. In Slovak conditions, the research group around Výrost (1989) was interested in the problem of LOC. It suggested a new name for this variable: "locus of crucial influence".

Bandura (1977) is known thanks to the concept of self-efficacy. He defined it as people's beliefs in their capabilities to exercise control over events that affect their lives.

Kobasa (1979) defined the concept of hardiness. She observed that there exist people who handle life problems better than the others, they are psychologically and somatically healthier, they care about themselves, they use effective coping strategies. She used the existential approach within the data analysis and she abstracted three main traits by which are these people characterized. The first is the control. It is the ability to control and manage the happening around a man/woman. The second one is the commitment. It is the identification with the task and the tendency to solve it. And the third one is the challenge. It is the ability to handle the hard life events (which is also known as a fighting spirit).

Rosenbaum (1983) came with the concept of learned resourcefulness. He described it as an acquired repertoire of behaviour and skills by which a person self-regulates internal events — such as emotions, pain, and cognitions — that interfere with the smooth execution of behaviour.

Weiner (1985) is well known thanks to the concept of the causal attributions. He characterized them as perceived causes of successes and failures.

Wolin and Wolin (1993), as well as other authors, were interested in the problem of resilience. Komárik (2010) defined the resilience as a specific ability to not fall into desperation. Wolin and Wolin (1993) perceived the resilience as the competence composed of insight, independence, initiative, creativity, humour and morality.

Skinner (1995) defined the concept of perceived control. She wrote that perceived control represents the naive causal models of how the world works: about the likely causes of desired and undesired events, about their own role in successes and failures, about the responsiveness of other people, institutions and social systems.

One of the biggest theories of resourcefulness comes from Antonovsky. It is called the Sense of Coherence.

2.2 Sense of Coherence

The Sense of Coherence is the concept of Antonovsky, a professor of medicine sociology at Israeli University in Beersheba. Regarding the geopolitical context, it is not surprising that Antonovsky deals with the salutogenic process which regards the human system as altogether unreliable, permanently threatened by interfering processes and elements which are unavoidable. Salutogenic approach assumes that we are able to cope with the difficult world among us¹ (Antonovsky, 1985).

The term coherence (integrity) is represented in two meanings. Besides integration of personal features, it refers to social coherence which according to the author (Antonovsky, 1987) should help people to survive in maximum stress conditions. A similar understanding of human essence (or normality, health) can be also found in the work of Israeli philosopher Buber (1995).

If we want to characterize coherence as personal feature it is necessary, according to Antonovsky (1987), to decompose it into three main variables, which he calls comprehensibility of situation, meaningfulness of fight and manageability of tasks.

Comprehensibility represents a cognitive dimension of the sense of coherence. It issues from the human ability to structuralize material and social world and perceive its meaning. The belief about the operation of the world is individually consistent and comprehensive. These attributes are interconnected with the focus of a person onto the global picture of the world, stability of order, anticipation and reliability of a given status. The opposite of comprehension is chaos which issues from a person not being able to understand stability and reliability of the world order. The person perceives the world as incomprehensible, illogical. The person doesn't feel to be able to perceive the complexity and perspective of the world.

The meaningfulness has a close relation to the human motivation, more specifically with a person's life aims. It is expressed by a personal conviction that in a given situation it is meaningful to invest time and energy to overcome the obstacles leading to the target. The prerequisite is the person's high frustration tolerance and expected benefit is the acknowledgement from the social surroundings. At the same time, meaningfulness is connected to initiative, creativity, high aspirations. The opposite of meaningfulness is alienation which is characterized by impassivity, social isolation, demotivation. May (2005) identifies this condition as apathy. Human's behaviour in this condition can be characterized as a tendency to social isolation, avoiding social interactions which are perceived as problematic.

Manageability is an executive element of sense of coherence. It represents a global personal feature related to self-concept and resulting from understanding the possibilities that are available to deal with the situation. It is the trust in oneself, conviction about own efficacy, about personal and social competence which entitle a person to think he/she can handle the situation requirements. The opposite is the conviction that a person has no methods to deal with the given situation. It is accompanied by depression, anxiety, fear, worries. Seligman (1975) calls this condition helplessness.

Antonovsky can be considered as a pioneer in a new approach to psychic health and health in general. He

¹ Despite the social and political instability on Israel's territory, more than 90% of adolescents regard themselves as happy.

calls this approach salutogenic (Antonovsky, 1985) and offers it as an alternative to pathogenic approach which is remainder of medicinal understanding of personality normality and its cure and lasts till these days. It distinguishes itself by:

- opening space to subjective interpretation of own condition,
- considering all important information about a person,
- freeing itself from the simple model of “one activator — one cure” and passes to the multiple causation concept,
- focusing on what is healthy,
- refusing the concept of health and illness as qualitatively different and dichotomous conditions.

Such defined approach to understanding of health, world, oneself and subjective sources is considered to be appropriate especially in relation to life satisfaction and its evaluation.

2.3 Life Satisfaction

In relation to the issue of quality of life, health, relation to oneself and own possibilities, there occur terms in literature (e.g., Neill, 1996; Neill, 2007; Neill, Marsch & Richards, 1997; Covey, 1994), for example life effectiveness and life satisfaction. In a wider definition the term satisfaction represents a certain level of personal coping, personal happiness and often also the level of personal experiencing of own position in a closer social framework. In a common understanding it is however simply connected only to certain psychical occurrences after achieving certain aims and it is expressed by establishing that it is the result of satisfying human needs (Kollárik, 2004). In a closer definition it represents the life evaluation as a whole, based on the connection between personal aims and their achievement, individual evaluation of past and recent life conditions and expected life perspective and evaluation fixed to following areas: health, job and occupation, financial situation, free time, marriage and partnership, relation to own children, satisfaction with oneself, sexuality, friends and acquaintances, living (Fahrenberg, Myrtek, Schumacher & Brahler, 2001).

Life effectiveness represents person's possibilities to live his/her life effectively and purposefully. Within the life effectiveness are determined levels of various personal abilities and skills which influence the life effectiveness. The concept of life effectiveness presumes the existence of certain personal characteristics which act as important and efficient factors by achievement and fulfilment of aims and desires in life.

If we think about own life effectiveness, we have to first consider and think about how we operate at work or in school, both in personal and in social life. Performance achieved in these areas of life enables some basic personal effective abilities which can be developed by learning.

Life effectiveness represents multi-dimensional, dynamic, general life skills which can be theoretically and practically developed in terms of increasing the value (of life) and are related to coping and prosperity. We think about life effectiveness in questions, how well does the person operate at work or in school, both in personal and social life.

Life effectiveness is often related to a more notorious term perceived self-efficacy which is related to the persuasion of an individual about the control of situations, events, about the possibility to influence own life (Pajares, 2008). High expectation of own efficacy influences the creation of optimistic attitudes, adds to interpretation of difficult tasks as challenges and correlates with the life quality. It is possible to state that people who assume that they are able to control the action of events are able to better handle their own emotional condition and also adverse life situations. People with higher estimation of personal efficacy also aspire to higher

aims, are more persistent and generally more resistant against failure. On the other hand, low perceived personal efficacy is considered to be a personal characteristic from which originates psychic vulnerability, self-accusation, low self-confidence, etc. In general it can be said that perceived personal efficacy is in our cultural circle an important condition for satisfied life. Self-efficacy concept was presented by Bandura (1986) in his social-cognitive theory which accentuates the self-persuasion role and issues from reciprocal determinism. The way by which people interpret the results of own actions changes their environment, changes their personal characteristics and brings information for future actions. This is the basis of Bandura's reciprocal determinism, and so the understanding of interaction in a form of triadic reciprocity which is created by: personal factors in the form of cognitive, affective and biological phenomena, behaviour and environment influence.

Reciprocal essence of sources of human operation according to social-cognitive theory enables the influence onto well-being, subjective well-being by improving emotional, cognitive or motivational processes which create the main group of personal factors at young people.

Neill (2007) characterizes the life efficacy also as an area for personal and social development which is generally achieved by intervention programs. Today there exist common programs that teach the people to manage their time, communicate and keep adequate social contacts, they exert effort to develop self-confidence, adequate emotional control, etc.

The connection of life-efficacy and life satisfaction was observed in research by Verešová et al. (2009). The authors came to the conclusion that the level of evaluation and experiencing of future teachers' lives as being satisfactory is related to the level of efficiency in various areas which is a representation of utilization of dynamic life abilities, skills which are related to their prospering and coping with everyday life aspirations. They discovered that the general life satisfaction of future teachers is in a significant positive correlation with their general life efficacy.

Life satisfaction is one of the indicators of life quality. It represents individual ability to saturate basic needs (Campbell et al., 1976). It depends from individually defined conceptions about identity, social roles, personal values, character of experience and reflection of specific cultural context (Watson & Protinsky, 1988; Fine & Schwebel, 1991). If we want to evaluate life satisfaction, we have available various objective and subjective indicators of life experience.

Objective indicators of life satisfaction are (according to various authors) social status, life conditions, education, occupation, income, gender, community size, local social, political and economic systems, marital status (e.g., Campbell et al., 1976; Broman, 1991; Eyles, 1990; Melton, 1983; Peters et al., 1986; Wilson et al., 1993; Wilson & Peterson, 1988).

Subjective indicators of life satisfaction are related to subjective perception, evaluation, values and feelings of different people. According to various authors (e.g., Allardt, 1978; Campbell et al., 1976; Douthitt et al., 1992; Eyles, 1990; Gutek et al., 1983; Sekaran, 1986), they represent personal evaluations of personal and social life, self-esteem, achievement of goals at work, level of progress of life aims. We can divide them into three big circles. They are related to work, personal life and thoughts and feelings about own self.

Life satisfaction is distinctive from other related constructs such as positive or negative affect, self-esteem, and optimism. Those with higher levels of life satisfaction have a better and more effective lifestyle, experience more positive feelings, and enjoy a better general health (Salimi, Azad Marzaabadi & Abedi, 2013).

Various researchers maintain that the sense of coherence has a statistically significant connection with quality of life (Gerasimčik-Pulko et al., 2009). Fok et al. (in Gerasimčik-Pulko et al., 2009) have found that people who

suffer from a severe illness but have high a level of SOC are able to take the initiative and attribute to themselves the responsibility for their health.

2.4 Hypothesis

Based on above mentioned theoretical resources, our research problem is to find out differences between university students — future students in life satisfaction (its 10 evaluated areas) in regard to 3 factors of sense of coherence (comprehensibility, meaningfulness, manageability).

Based on set research problem we hypothesize that:

H1: there exists the difference in the life satisfaction in the relation to the comprehensibility.

H2: there exists the difference in the life satisfaction in the relation to the meaningfulness.

H3: there exists the difference in the life satisfaction in the relation to the manageability.

By construction of our hypotheses we bear on the findings of Moksnes, Løhre, Espen (2013) who discovered statistically significant relation between sense of coherence and life satisfaction in adolescent population with value of correlation coefficient $r = 0.63$. At the same time they discovered that in the model in which they researched the predictive force of various factors contributing to experiencing life satisfaction, the most important factor was the sense of coherence. The other factors with significantly lower prediction power were gender, age, physical activity, subjective health.

3. Methodology

3.1 Research Sample

The sample consisted of 320 participants whose average age was 22.17 years. They were the students of a university. The number of males was 57 and the number of females was 281 while this corresponds to gender representation of the males and females at the Faculty of Education at Constantine the Philosopher University in Nitra where the research was realised. The number of participants in the research groups was lower than global number of the participants because a specific approach to creation of the research groups was used. It is described in the chapter Results.

3.2 Materials and Method

We used the following research methods:

3.2.1 Life Satisfaction Questionnaire LSQ (Fahrenberg, Myrtek, Schumacher & Brähler, 2001)

The questionnaire is designated to relatively reliably capture the individual picture of general human life satisfaction and differentiation of this satisfaction into ten areas.

It contains 10 scales which cover various elements of life satisfaction. Every scale consists of seven items which the correspondent answers using a seven-point scale, where 1 represents the answer “very unsatisfied” and 7 represents the answer “very satisfied”. In total there are therefore 70 items.

The questionnaire scales are as follows:

(1) Health. Persons with high values in this scale are satisfied with their general health condition, with their psychical and physical condition, with their physical performance and resistance against illnesses.

(2) Jobs and occupation. Persons with high value in this scale are satisfied with their position in job, with their successes and progress possibilities. They positively evaluate the sureness of their professional future and they are satisfied with the extent of the requirements and work load. In our case this scale was modified so that it

reflects life satisfaction in school environment.

(3) Finances. Persons with high value in this scale consider their income, the amount of their property and their life standard as satisfactory. This is valid also for securing the existence, the possibility of future earnings and retirement assurance. With this issue also corresponds the satisfaction with family's financial possibilities.

(4) Free time. Persons with high value in this scale are satisfied with the length and quality of their free time and their vacation. They available time for their hobbies and for close persons is positively evaluated, as well as the general diversity in free time.

(5) Partnership. Persons with high value in this scale are in important aspect of their partnership satisfied with the requirements, mutual activities, partner's openness, understanding and willingness to help, tenderness and safety

(6) Relation to own children. Persons with high value in this scale evaluate relations to own children as generally positive. They are satisfied with their influence on their children, with mutual activities and with their children's appreciation of them. This scale was not used in the research. We assumed low representation of respondents with own children.

(7) Own person. Persons with high value in this scale are satisfied with many aspects of their personality: with their appearance, their abilities, character, their vitality and self-confidence. Here belongs also the evaluation of their life style which they have led to this moment and coping with other people.

(8) Sexuality. Persons with high value in this scale positively evaluate their physical attractiveness; they are satisfied with their sexual performance, their sexual contacts and sexual reactions. This includes the possibility to openly speak about the area of sexuality and generally about sexual harmony with partner.

(9) Friends, acquaintances and family. Persons with high value in this scale are satisfied with their social relations, this means with the circle of friends and acquaintances, with their contacts with family and neighbours. They positively evaluate the social activities and social involvement, generally the number of contacts with the others.

(10) Living. Persons with high value in this scale are satisfied with living conditions, this means the size, condition and position of their living quarters, with the availability of traffic and transport means, with the cost of living, as well as with the living standards.

3.2.2 Sense of Coherence Scale SOCS (Antonovsky, 1987)

Sense of Coherence Scale is designated to capture individual ability to cope difficult life situations and it is saturated by three variables — comprehensibility, meaningfulness and manageability. Their description is stated in chapter Sense of Coherence.

The scale consists of 29 items which have to be evaluated by the respondent using a seven-point scale, where 1 represents the answer "never" and 7 represents the answer "always".

4. Results

Before we came to the statistical analysis, we had divided the research sample into the groups which differ in the criterions of the coherence. In all cases, we utilized the formula: $AM \pm SD$, where AM is arithmetic mean and SD is standard deviation. We acquired two critical values of the variables, which we considered for lower, or upper values which determined the low level of variable and the high one. It means that we constructed these pairs:

- low comprehensibility – high comprehensibility,
- low meaningfulness – high meaningfulness,
- low manageability – high manageability.

This procedure caused that our research sample decreased because we did not work with the groups of the participants who scored in the mediate values of the variables.

To test our hypothesis we used Statistical Program for Social Science 16.0. We used t-test to test the differences between the research groups. As a critical statistical value which indicates the statistical significance, we appointed the standard value of $p \leq 0.05$.

The results are presented in Tables 1–3 and in Figures 1–3.

Table 1 Comparison of the Life Satisfaction According to Level of the Comprehensibility

	comprehensibility								t	p
	low				high					
	N	AM	SD	SEM	N	AM	SD	SEM		
LSQ-health	52	30.04	7.13	0.99	52	35.62	6.16	0.85	4.268	< 0.001
LSQ-school	52	30.62	7.76	1.08	52	35.27	5.97	0.83	3.426	0.001
LSQ-finance	52	47.17	5.77	0.80	52	50.71	5.11	0.71	3.309	0.001
LSQ-leisure time	52	45.04	8.22	1.14	52	47.77	6.75	0.94	1.851	0.067
LSQ-partnership	37	42.27	5.37	0.88	38	42.66	6.00	0.97	0.295	0.769
LSQ-own person	52	33.25	6.98	0.97	52	39.37	5.55	0.77	4.946	< 0.001
LSQ-sexuality	50	35.26	7.67	1.08	49	39.22	5.95	0.85	2.871	0.005
LSQ-friends acquaintances	52	36.94	6.47	0.90	52	39.48	6.51	0.90	1.995	0.049
LSQ-accommodation	52	35.87	8.70	1.21	52	38.02	6.98	0.97	1.393	0.167

Legend: LSQ = Life Satisfaction Questionnaire; N = count; SD = standard deviation; SEM = standard error of mean; t = t-value; p = significance.

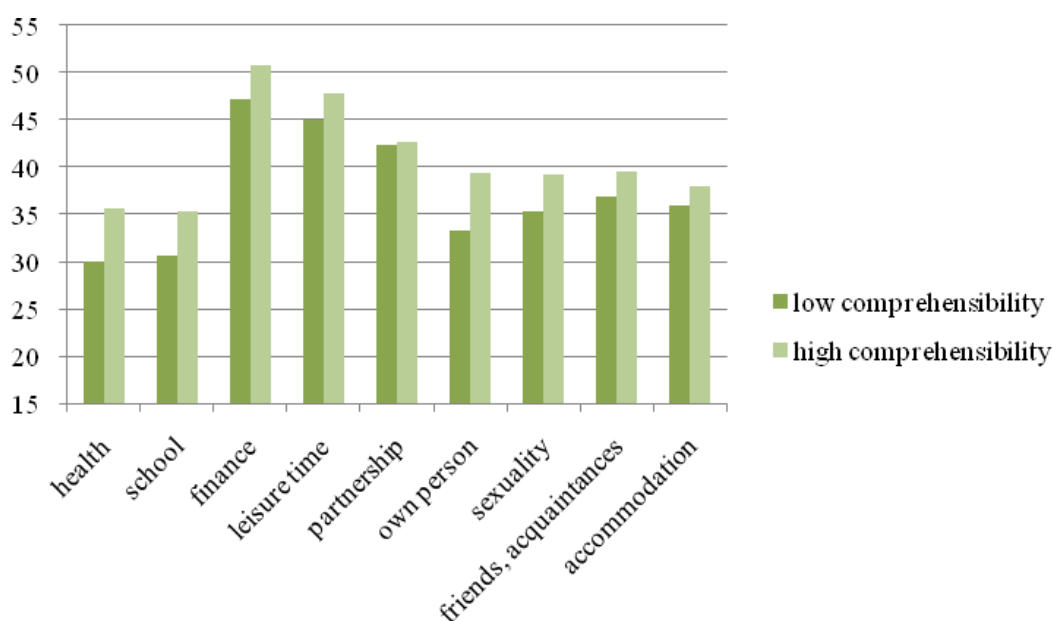


Figure 1 Comparison of the Life Satisfaction According to Level of the Comprehensibility

Differences in Life Satisfaction in Relation to Sense of Coherence of Future Teachers

Table 2 Comparison of the Life Satisfaction According to Level of the Meaningfulness

	meaningfulness								t	p
	low				high					
	N	AM	SD	SEM	N	AM	SD	SEM		
LSQ-health	58	29.26	7.01	0.92	56	36.04	6.22	0.83	5.453	<0.001
LSQ-school	58	30.50	6.74	0.89	56	35.75	5.54	0.74	4.535	<0.001
LSQ-finance	58	47.55	5.48	0.72	56	50.91	4.91	0.66	3.443	0.001
LSQ-leisure time	58	44.19	7.93	1.04	56	48.48	6.97	0.93	3.065	0.003
LSQ-partnership	38	40.53	5.60	0.91	48	43.81	4.93	0.71	2.890	0.005
LSQ-own person	58	31.66	6.94	0.91	56	40.52	4.42	0.59	8.103	<0.001
LSQ-sexuality	57	33.44	7.63	1.01	56	40.13	5.41	0.72	5.365	<0.001
LSQ-friends, acquaintances	58	34.69	6.88	0.90	56	40.61	3.77	0.50	5.665	<0.001
LSQ-accommodation	58	34.66	8.18	1.07	56	40.23	6.61	0.88	3.998	<0.001

Legend: LSQ = Life Satisfaction Questionnaire; N = count; SD = standard deviation; SEM = standard error of mean; t = t-value; p = significance.

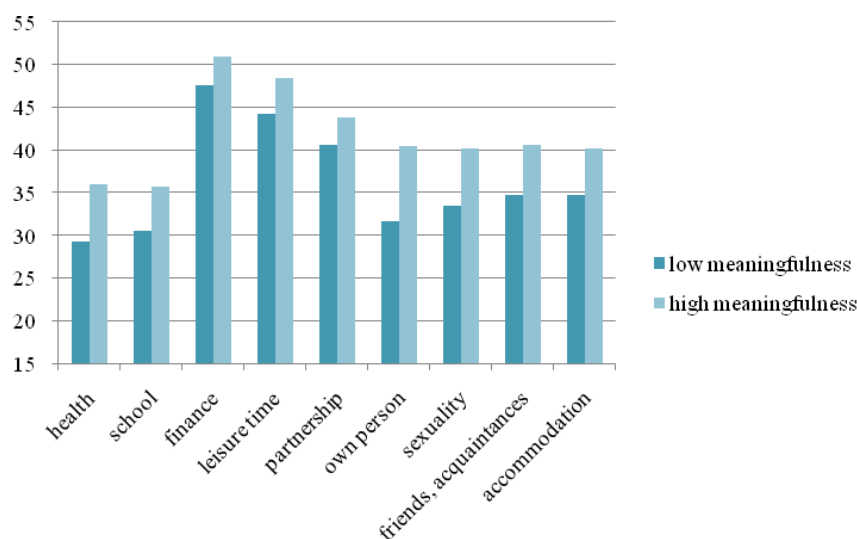


Figure 2 Comparison of the Life Satisfaction According to Level of the Meaningfulness

Table 3 Comparison of the Life Satisfaction According to Level of the Manageability

	manageability								t	p
	low				high					
	N	AM	SD	SEM	N	AM	SD	SEM		
LSQ-health	57	30.46	6.67	0.88	49	37.31	6.22	0.89	5.436	<0.001
LSQ-school	57	30.75	6.89	0.91	49	36.08	4.59	0.66	4.604	<0.001
LSQ-finance	57	46.63	5.84	0.77	49	52.12	4.22	0.60	5.471	<0.001
LSQ-leisure time	57	42.96	7.86	1.04	49	48.51	5.98	0.86	4.035	<0.001
LSQ-partnership	42	38.95	8.26	1.28	34	44.50	4.88	0.84	3.455	0.001
LSQ-own person	57	31.02	6.78	0.90	49	40.51	3.65	0.52	8.772	<0.001
LSQ-sexuality	57	34.16	7.24	0.96	45	39.40	5.97	0.89	3.918	<0.001
LSQ-friends, acquaintances	57	33.93	7.26	0.96	49	41.04	4.86	0.69	5.824	<0.001
LSQ-accommodation	56	33.66	8.66	1.16	49	40.84	6.32	0.90	4.791	<0.001

Legend: LSQ = Life Satisfaction Questionnaire; N = count; SD = standard deviation; SEM = standard error of mean; t = t-value; p = significance.

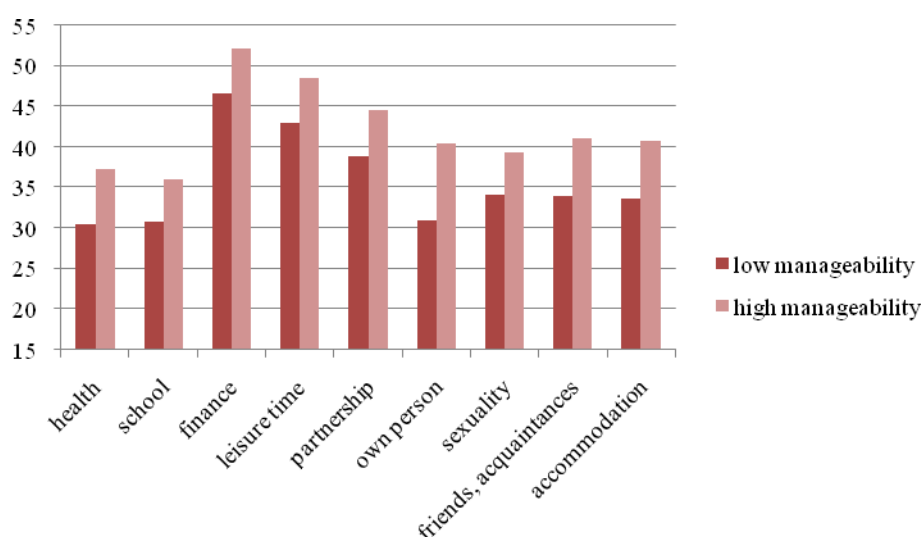


Figure 3 Comparison of the Life Satisfaction According to Level of the Manageability

We found the differences in life satisfaction in relation to the comprehensibility, meaningfulness, manageability, specifically:

- higher life satisfaction in health ($t = 4.268$; $p < 0.001$), school ($t = 3.426$; $p = 0.001$), finance ($t = 3.309$; $p = 0.001$), own person ($t = 4.946$; $p < 0.001$), sexuality ($t = 2.871$; $p = 0.005$), friend and acquaintances ($t = 1.995$; $p = 0.049$) in the group with high level of the comprehensibility (table 1, figure 1);
- higher life satisfaction in health ($t = 5.453$; $p < 0.001$), school ($t = 4.535$; $p < 0.001$), finance ($t = 3.443$; $p = 0.001$), leisure time ($t = 3.065$; $p = 0.003$), partnership ($t = 2.890$; $p = 0.005$), own person ($t = 8.103$; $p < 0.001$), sexuality ($t = 5.365$; $p < 0.001$), friends and acquaintances ($t = 5.665$; $p < 0.001$), accommodation ($t = 3.998$; $p < 0.001$) in the group with high level of the meaningfulness (table 2, figure 2);
- higher life satisfaction in health ($t = 5.436$; $p < 0.001$), school ($t = 4.604$; $p < 0.001$), finance ($t = 5.471$; $p < 0.001$), leisure time ($t = 4.035$; $p < 0.001$), partnership ($t = 3.455$; $p = 0.001$), own person ($t = 8.772$; $p < 0.001$), sexuality ($t = 3.918$; $p < 0.001$), friends and acquaintances ($t = 5.824$; $p < 0.001$), accommodation ($t = 4.791$; $p < 0.001$) in the group with high level of the manageability (Table 3, Figure 3).
- From the perspective of the descriptive characteristics, we found:
- the biggest differences between the groups with high level of variable and low level in manageability; we did not measure the difference of the average means lower than 5 points,
- the biggest differences between the groups with high level of variable and low level in the variable called own person; the differences are the biggest in all variables of the coherence: comprehensibility, meaningfulness, manageability,
- that the highest score of life satisfaction variables was measured in finance, leisure time, partnership (in this order) in all three variables of the coherence: comprehensibility, meaningfulness, manageability. This fact is valid in the group with high level of the variable and also with the low level.
- that the lowest score of life satisfaction variables was measured in school, health, sexuality (in this order) in two variables of the coherence: meaningfulness, manageability; and in school, health, accommodation (in this order) in comprehensibility. This fact is valid only in the group with high level of the variable. In the group with low level of the variable there is present this order: health, school, own person.

Despite of that we did not find any significant differences between the people with high and low level of the comprehensibility in all variables of the life satisfaction, we allege that we can support all hypotheses that we stated (chapter 2.3).

5. Discussion and Conclusion

We found out that among people with a high and low level of sense of coherence there are present differences in life satisfaction. If we accept the structural determination of sense of coherence as a three-factor phenomenon (comprehensibility, meaningfulness, manageability), than we can ascertain that life satisfaction of people is determined mainly by their perception of a specific area of their lives to be manageable and meaningful. Comprehensibility factor also plays its role but it hasn't registered as a key factor in our research.

For people with a low level of sense of coherence who distinguish themselves by a low level of experienced control, helplessness, despair, fear, lack of motivation, alienation, mistrust in stability and lucidity, it is natural that they evaluate areas of health, school and their own person as least satisfactory. These are areas which are most closely connected with the personality core and its physical boundaries, individual possibilities, their knowledge and resulting attitude to own potentials and deficiencies. People with low level of sense of coherence could therefore be characterized as relatively satisfied with their time management during everyday activities (work, leisure time, partner) and at the same time unsatisfied with what they can influence most (their health, school results, themselves). It is possible to assume a high production of socially demanded behaviour in these people, creation of the impression of socially active and balanced person who at the same time masks his/her own (subjectively perceived) incompetence. In an Adler sense we could speak about a dominance complex.

On the other hand, people with high level of sense of integrity are characterized as focusing on complexity and reliability, high resistance to unfavourable circumstances and a healthy self-perception connected with generalized experience about the fact that their own behaviour and outer events are connected. The biggest life satisfaction is experienced in relation to finances, leisure time and partnership. The lowest satisfaction is claimed in relation to school, health and sexuality, or accommodation. A relatively high dissatisfaction in relation to fulfilling social needs or the tendency to achieving proximity, safety and security can be presumed at these people.

In relation to age specific factors in the research sample, meaning post-adolescent population preparing itself for future occupation at university, these research findings are expectable. However, we would like to particularly focus on factors that are least satisfactory — health and school. We think that this artefact is caused by long-term studying, that we have no control about our fate in school and healthcare premises. It is always someone else who decides for ourselves, lets us in the context of information deficit and is too far from us to offer us support (this is a generalized allegation valid for the majority not for all) and gaining formal approval with proceedings is insufficient to modify our experience.

Generally we can observe that this gained knowledge is in accordance with the results of other researches. Wissing et al. (2010) discovered a positive relationship between the sense of coherence and positive emotions and balance of emotions, which is an indirect indicator of inner balance and regulation of own behaviour. Myrin, Lagerström (2008) identified four psycho-social factors participating on the low sense of coherence: femininity, depressive symptomatology, fear for family relatives, health problems and dissatisfaction with life. Axelsson et al. (2005) found out that attitude to work (duties) is, beside other factors, influenced by the quality of life, sense of coherence, parental support and school experience. Neuner et al. (2011) found out that sense of coherence

influences many aspects of well-being: physical comfort, self-esteem, relations in family, relations with friends, relations at school.

We believe that the research results are possible to be generalize on the whole adolescent, or post-adolescent population studying at universities in Slovakia. The research sample is relatively large. Further research would however require increasing the number of male participants. From the point of view of generalization of further researches, a challenge would be presented in the utilization of triangulation methods serving to diagnose the sense of coherence and life satisfaction.

References

- Allardt E. (1978). "The relationship between objective and subjective indicators in light of a comparative study", in: R. F. Tomasson, (Ed.), *Comparative Studies in Sociology*, Greenwich, CT: J.A.I., pp. 203–216.
- Antonovsky A. (1985). *Health, Stress and Coping*, San Francisco: Jossey-Bass.
- Antonovsky A. (1987). *Unraveling the Mystery of Health: How People Manage Stress and Stay Well*, San Francisco: Jossey-Bass.
- Axelsson L. et al. (2005). "Work ethics and general work attitudes in adolescents are related to quality of life, sense of coherence and subjective health — A Swedish questionnaire study", *BMC Public Health*, Vol. 5, No. 1, pp. 103–112.
- Bandura A. (1977). "Self-efficacy: Toward a unifying theory of behavioral change", *Psychological Review*, Vol. 84, No. 2, pp. 191–215.
- Bandura A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*, New Jersey: Prentice-Hall.
- Broman C. L. (1991). "Gender, work-family roles, and psychological well-being of blacks", *Journal of Marriage and the Family*, Vol. 53, No. 2, pp. 509–520.
- Buber M. (1995). *Já a Ty*, Olomouc: Votobia.
- Campbell A., Converse P. E. and Rogers W. L. (1976). *The Quality of American Life: Perceptions, Evaluations, and Satisfaction*, New York: Russell Sage Foundation.
- Covey S. R. (1994). *Sedem návykov pre úspešný a harmonický život*, Bratislava: Open Windows.
- Douthitt R. A., MacDonald M. and Mullins R. (1992). "The relationship between measures of subjective and economic well-being: A new look", *Social Indicators Research*, Vol. 26, No. 4, pp. 407–422.
- Eyles J. (1990). "Objectifying the subjective: The measurement of environmental quality", *Social Indicators Research*, Vol. 22, No. 2, pp. 139–153.
- Fahrenberg J., Myrtek M., Schumacher J. and Brahler E. (2001). *Dotazník životní spokojenosti*, Praha: Test centrum.
- Fine M. A. and Schwebel A. I. (1991). "Resiliency in black children from single-parent families", in: W. A. Rhodes & W. R. Brown, (Eds.), *Why Some Children Succeed Despite the Odds*, New York: Praeger, pp. 23–40.
- Gerasimčik-Pulko V., Pilekaitė-Markovienė M., Bulotienė G. and Ostapenko V. (2009). "Relationship between sense of coherence and quality of life in early stage breast cancer patients", *Acta Medica Lituanica*, Vol. 16, No. 3–4, pp. 139–144.
- Gutek B. A., Allen H., Tyler T. R., Lau R. R. and Majchrzak A. (1983). "The importance of internal referents as determinants of satisfaction", *Journal of Community Psychology*, Vol. 55, No. 11, pp. 111–122.
- Kobasa S. C. (1979). "Stressful life events and health: An inquiry into hardiness", *Journal of Personality and Social Psychology*, Vol. 37, No. 1, pp. 1–11.
- Kollárik T. (2004). "Meranie spokojnosti v práci", in: T. Kollárik & E. Sollárová et al. (Eds.), *Metódy sociálnopsychologickej praxe*, Bratislava: Pegas, pp. 196–222.
- Komárik E. (2010). "Reziliencia v kontexte života", in: E. Komárik (Ed.), *Kontexty reziliencie*, Nitra: PF UKF, pp. 9–20.
- Lefcourt H. M. (1981). "The construction and development of the multidimensional — Multiattributitional causal scales", in: H. M. Lefcourt (Ed.), *Research with the Locus of Control Construct*, New York: Academic Press, pp. 245–277.
- Levenson H. (1981). "Differentiating among internality, powerful others and chance", in: H. M. Lefcourt (Ed.), *Research with the Locus of Control Construct*, New York: Academic Press, pp. 15–63.
- May R. (2005). *Láska a vôľa*, Bratislava: Ikar.
- Melton G. B. (1983). "Ruralness as a psychological construct", in: A. W. Childs & G. B. Melton (Eds.), *Rural Psychology*, New York: Plenum, pp. 1–13.
- Moksnes U. K., Løhre A. and Espnes G. A. (2013). "The association between sense of coherence and life satisfaction in adolescents", *Quality of Life Research*, Vol. 22, No. 6, pp. 1331–1338.

- Myrin B. and Lagerström M. (2008). "Sense of coherence and psychosocial factors among adolescents", *Acta Paediatrica*, Vol. 98, No. 6, pp. 805–811.
- Neill J. T. (1996). *The Outdoor Experience Program, Kids on Top II: Summary of Life Effectiveness Outcomes*, Canberra, ACT, Australia: Outward Bound Australia.
- Neill J. T. (2007). "Life effectiveness questionnaire: A research tool for measuring personal change", available online at: <http://www.wilderdom.com/leq>.
- Neill J. T. (2007). "What is life effectiveness", available online at: <http://wilderdom.com/tools/leq/LEQWhatIsLifeEffectiveness.html>.
- Neill J. T., Marsh H. W. and Richards G. E. (2003). *The Life Effectiveness Questionnaire: Development and Psychometrics*, Sydney: University of Western Sydney.
- Neuner B. et al. (2011). "Sense of coherence as a predictor of quality of life in adolescents with congenital heart defects: A register-based 1-year follow-up study", *Journal of Developmental & Behavioral Pediatrics*, Vol. 32, No. 4, pp. 316–327.
- Pajares F. (2008). "Čo je self-efficacy", available online at: <http://web.ff.cuni.cz/~hosksaff/self-efficacy.html>.
- Peters D. F., Wilson S. M. and Peterson G. W. (1986). "Adolescents and rural appalachian families", in: G. K. Leigh & G. W. Peterson, (Eds.), *Adolescents in Families*, Cincinnati, OH: South-Western, pp. 456–472.
- Rosenbaum M. (1983). "Learned resourcefulness as a behavioral repertoire for the self-regulation of internal events: Issues and speculations", in: M. Rosenbaum, C. M. Franks & Y. Jaffe (Eds.), *Perspectives on Behavior Therapy in the Eighties*, New York: Springer, pp. 54–73.
- Rotter J. B. (1954). *Social Learning and Clinical Psychology*, New York: Prentice-Hall.
- Salimi S. H., Azad Marzaabadi E. and Abedi M. (2013). "Mental health and its relationship with job burnout and life satisfaction in staff at a military university", *Iranian Journal of Military Medicine*, Vol. 14, No. 4, pp. 289–294.
- Sekaran U. (1986). "Significant differences in quality of life factors and their correlates: A function of differences in career orientation or gender?", *Sex Roles*, Vol. 14, No. 5–6, pp. 261–279.
- Seligman M. E. P. (1975). *Helplessness: On Depression, Development, and Death*, San Francisco: W.H. Freeman.
- Skinner E. A. (1995). *Perceived Control, Motivation, and Coping*, Thousand Oaks: Sage Publications.
- Verešová M., Malá D. and Gatíal V. (2009). "Relationship of life efficiency and satisfactory of future teachers in the context of quality of their life", *Quality in the Educational System*, Nowy Sacz: PWSZ, pp. 69–78.
- Watson M. F. and Protinsky H. O. (1988). "Black adolescent identity development: Effects of perceived family structure", *Family Relations*, Vol. 37, No. 3, pp. 288–292.
- Weiner B. (1985). "An attributional theory of achievement motivation and emotion", *Psychological Review*, Vol. 92, No. 4, pp. 548–573.
- Wilson S. M. and Peterson G. W. (1988). "Life satisfaction among young adults from rural families", *Family Relations*, Vol. 37, No. 3, pp. 84–91.
- Wilson S. M., Peterson G. W. and Wilson P. (1993). "The process of educational and occupational attainment of adolescent females from low-income, rural families", *Journal of Marriage and the Family*, Vol. 55, No. 4, pp. 158–175.
- Wissing M. P. et al. (2010). "Validation of three Setswana measures for psychological wellbeing", *Journal of Industrial Psychology*, Vol. 36, No. 2, pp. 86–93.
- Wolin S. and Wolin S. J. (1993). *The Resilient Self: How Survivors of Troubled Families Rise Above Adversity*, New York: Random House Publishing Group.