EpSBS



ISSN: 2357-1330

http://dx.doi.org/10.15405/epsbs.2017.11.9

6th icCSBs 2017 The Annual International Conference on Cognitive - Social, and Behavioural Sciences

COPING STRATEGIES AND MEANING OF LIFE AMONG CZECH ADOLESCENT STUDENTS

Martina Zouharová (a)*, Irena Plevová (b), Marie Chrásková (c)
*Corresponding author

- (a) Martina Zouharová, Faculty of Education, Palacký University Olomouc, Žižkovonám. č. 5, Olomouc 771 40, Czech Republic, martina.zouharova01@upol.cz
- (b) Irena Plevová, Faculty of Education, Palacký University Olomouc, Žižkovonám. č. 5, Olomouc 771 40, Czech Republic, irena.plevova@upol.cz
- (c) Marie Chrásková, Faculty of Education, Palacký University Olomouc, Žižkovonám. č. 5, Olomouc 771 40, Czech Republic, marie.chraskova@upol.cz

Abstract

The purpose of the paper was to clarify the relationship between selected coping strategies to handle stress and perceived meaning of life in adolescents in the context of education. The results of the research enhanced the current understanding because to our knowledge the combination of coping and meaning of life among adolescents had not been addressed so far unlike other factors such as personal characteristics, locus of control, and resilience. The results might be of interest from psychological and educational perspectives, specifically in educational diagnostics and other educational theories. Coping strategies were diagnosed by means of a standardized SVF78 questionnaire. Personal meanings of life were determined by a standardized ESK range. These standardized measurement tools were complemented with questionnaires to evaluate demographic and other data. The research sample included grade 3 and 4 students from various secondary schools in the Olomouc region. The expected outcomes may then determine the conclusions which teachers in secondary schools and students themselves might use, as the results could provide feedback about their coping strategies, evaluate their school load, or possibly about the connections between perceived meaning of life and time management. The most often chosen coping strategies were control strategies (Situation Check, Response Check, and Positive Self-Instruction). Boys showed a higher ability to experience the meaningfulness of their own existence (P + E, mean 150.04) than girls (average 140.95). The strength of the relationship between coping strategies and meaningfulness was of a medium degree.

© 2017 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Adolescent, coping, school stress, meaning, education



1. Introduction

The period of adolescence is specific not only to the coping strategies that students choose to solve school stress situations but also to the question of the meaning of life, which at this age is particularly at the forefront. This period is typical of deepening and consolidating views not only on the world but above all on oneself. This research aims to reveal whether or not there is a significant link between coping strategies and the sense of life among adolescents.

2. Problem Statement

2.1. Developmental period of adolescence

According to E. H. Erikson, the developmental period of adolescence is a period of 'identity versus role confusion'. Such idea should include not only the cognitive experiences, but also ideas about gaining one's own independence(Erikson, 2002). Currently, the transition to adulthood is marked by greater individualization, social restrictions are no longer decisive, there are a number of different opportunities, and the process of identity formation is becoming loose; it is not clear what tasks young people should perform during this period (Mayseless, Keren, 2013). The end of the period of maturing (and adolescence) is marked by adoption of 'adult' roles, i.e. marriage, parenthood, and stability in occupational life. However, adoption of these roles is delayed, which prolongs the period of maturing. Therefore, this is not real maturing as described by developmental psychologists, or young adulthood, but rather a separate period of the life cycle in a modern industrialized environment, which should be considered a process that is not identical for all adolescents rather than a separate developmental stage (Sanders, 2013). Transition to adulthood to a large extent depends on the society in which the adolescent lives. According to some authors, the period between 10 and 24 years is a transition period from childhood to adulthood in the European society (Brizio, 2016), but Vygotsky (In Kholmogorova, 2016) emphasizes that there is no natural or biological criterion to mark the end of this period. The main conflict in this period is, therefore, the difference between biological and social maturing, which gradually escalates. At present, a quarter of the population around the world is made up of young adolescents aged 10-14 years (1.8 billion), but not all of them live in identical social conditions. For this reason, adolescents from lower social classes are more mature (adopt the role of an adult earlier), while adolescents from more successful social layers are more career-oriented, and therefore prolong their adolescence (Kholmogorova, 2016).

2.2. Stress

Coping with stress is a process of continuous processing and evaluation of information about the changing relationship between an individual and the environment (Lovenjak, Peklaj, 2016). Stress has a considerable effect on mental development throughout the period of maturing. If stress is experienced not only as a result of school attendance, it has a negative impact not only on the school 'career', but also threatens professional health in the future. A successful transition from adolescence to adulthood is, inter alia, supported by acquired stress coping competences. The adoption of the process of perceiving and coping with stress might be crucial to understanding stress situations and dealing with stress situations,

which eventually facilitates development and the transition from adolescence to adulthood. Younger children have less social knowledge about and experiences with stress coping than adults; moreover, they are still affected by the social uniformity of their environment, against which they fight as maturing adolescents (Eppelmann, Parzer, Lenzen et al., 2016). In adolescence, girls and boys face difficult developmental tasks, such as the inclusion in the group of peers, detachment from the family, and formation of their own identity. In their everyday life, adolescents need to cope with various stressors in a constructive way. Achievement of positive results in this context is crucial to future understanding of more serious stressors faced by adults (Markova, Nikitskaya, 2013). Stress situations that are typically faced by adolescents were classified in their research by Řehulka and Řehulková (2001). The authors mentioned stressors resulting from the following areas of adolescents' life: peers, looking at oneself, partnership, relationship with the family, study, communication with people, negotiation with teachers, body dissatisfaction, knowledge of the world, concerns about the future (Řehulková, Řehulka, 2001).

2.3. Coping strategies

Coping is understood as any cognitive or behavioural efforts to deal with stress or situations perceived as potentially threatening individuals' well-being (Mark & Smith, 2012). In coping with any stressful or difficult situation a person chooses an individual strategy aimed at adaptation to the changes, possibly minimizing undesirable effects on the individual's health (Pelcák, 2013). Coping can be further classified from various perspectives, but there are two principal categories - active coping (fight or flight) and passive coping (reduction of sensitivity to the environment, emotional numbness). Another system of classification distinguishes between a present or absent effort to eliminate the stress factor, etc. Active coping is associated with a lower level of emotional suffering, while passive coping is often related to the post-traumatic stress disorder or depression (Holton et al., 2015). It is also possible to classify coping strategies by focusing on coping with additional unpleasant emotions or focusing on coping directly with the stressor. The strategy aimed at coping with emotions is divided into three categories. The first is the rumination strategy - need to think about the problem again and again; not very efficient. The second strategy is avoidance – escape to shallow activities, such as gambling, alcohol, drugs, or food. These activities can be dangerous and do not help solve the problem. The third strategy is distraction performing pleasant activities for the purposes of distraction and gathering strengthfor resolving the situation (Novák, 2014). Problem-oriented coping focuses on the stressor and ways of changing it, circumventing it, eliminating it, or avoiding it in the future. While this type is directed outwards, emotionoriented coping is directed inwards and induces reassessment of one's values and attitudes, and deepening of self-reflection and self-acceptance (Pelcák, 2013; Chrásková&Kvintová, 2016).

2.4. Meaning in life

The concept of meaning in life applies to situations, which allow us to make choices, select and act. There is no meaning in material things, meaning comes only through human skills (Machovec, 2012). According to Maslow, meaningfulness becomes a motivational force in human life only if lower needs are met. The author describes meaningfulness as an internal ability of man. Each person chooses their own meaning in life according to their will and naturalness and according to what suits them. Existential

meaning is given precedence over this meaning as a meta-motive, which needs to be achieved, should a person lead a normal life. If not fulfilled, a person is unwell, has a feeling of emptiness and languishes, which can eventually cause suffering or serious disorders (Maslow, 2014). According to Frankl, meaning in life is a process of discovering values in specific life situations. The author described three paths, which he considers helpful in active searching for meaning in life. He described an experiential value, creative values, and attitudinal values (Frankl, 2015). Today's postmodern time favours subjective meaning. In this context, meaningful things are those that we understand, perceive and wish, but there is no dialogue with the outside world, care, and creativity for something or someone. The response is then increasing selfishness and emotional frustration (Kosová, 2014). According to Mayseless and Keren (2013), research on meaning in life in the period of emerging adulthood has considerable gaps. Their study is based on the theory that in this period, two basic areas are crucial to young people: love and work. The author's further state that searching for and finding a meaning in life during adolescence is one of the developmental tasks and that this task is getting to the forefront as a result of various social and cultural changes in the Western society (Mayseless & Keren, 2013).

3. Research Questions

The following research questions emerged from our concerns and a review of the literature:

- 3.1 Which coping strategies do secondary school students in the Olomouc region use most often?
- 3.2 Is there a difference between boys and girls in the selection of coping strategies?
- 3.3What degree of existentiality do secondary school students in the Olomouc region have?
- 3.4Is there a difference between boys and girls in the degree of existentiality?
- 3.5 Is there a correlation between the selection of a stress coping strategy and the degree of personal existentiality?
- 3.6 What is the most significant source of stress for secondary school students in the Olomouc region?

4. Purpose of the Study

The purpose of the study is to clarify the relationship between selected coping strategies to handle stress and perceived the meaning of life in adolescents in the context of education. The results of the research will enhance current understanding because to our knowledge the combination of coping and meaning of life among adolescents has not been addressed so far unlike other factors such as personal characteristics, the locus of control, resilience. The results may be of interest from psychological and educational perspectives, specifically in educational diagnostics and other educational theories.

5. Research Methods

5.1. SVF 78 Stress Coping Questionnaire

This questionnaire was developed by Wilhelm Janke and Gisela Erdmann and is used to identify stress coping strategies. The questionnaire contains 78 items classified in 13 scales. Each of the 13

subtests consists of 6 statements to which the participants respond on a five-point Likert scale (0 = Not at all, 5 = Very likely). According to their characteristics, the strategies are clustered. Positive strategy POS 1 (the reassessment strategy and devaluation strategy are included in the subtest of Play down and Guilt denial), POS 2 (strategy of disengagement from a stressful situation and/or engagement in alternative situations or activities – Substitutional satisfaction), and the last item POS 3 (situation control strategy – Situation control and Positive self-instruction). Negative strategies (NEG) include the following subtests: Flight tendency, Rumination, Resignation, and Self-accusation. These strategies rather lead to increased stress and indicate the absence of coping competencies, use of escape strategies, resignation, and inability to relax. The total score of positive strategies (POZ) is determined as the arithmetic mean of gross scores of the first seven subtests (Janke et al., 2003).

5.2. ESK Existence Scale

The basic principle of this test is existential-analytical anthropology by Viktor Frankl, whose theory of meaning in life is known as logotherapy. The scale consists of 46 items; the respondents indicate their personal degree of relevance on a six-point scale, where 1 is 'Absolutely true' and 6 is 'Not true at all'. The test includes all four steps to achieve the personal competencies for existence. These steps and qualities are as follows: Self-distance (cognitive distance from oneself; a person is not affected by his/her own wishes, ideas, goals), Self-transcendence (measure of the ability to perceive values and experience emotionally), Freedom (focused on the ability to make decisions), and Responsibility (measure of the ability to commit and engage in personal tasks and values). Self-transcendence and Self-distance further create Personality as a factor of a higher order, which includes the degree of openness to oneself and values; Freedom with Responsibility further create Existentiality as decisive engagement. A sum of these two factors (P+E) results in existential fulfilment, which expresses experiencing meaningful personal existence (Längle et al., 2001).

The students will also have an opportunity to indicate which area of life is most stressful. This questionnaire is based on the theory formulated by Řehulka and Řehulková (2001) and the ten areas that adolescents perceive as most stressful. The last item that was added was the Economic area.

6. Findings

A total of 244 randomly selectedstudents from 7 different types of secondary schools at the age of 18-21 years (average age 18.6 years) formed a research group of Czech secondary school students in the Olomouc Region. The survey included 73 girls and 82 boys, 89 respondents did not report gender (see table 01). Data from the research was processed in the statistical program STATISTICA 12, the T-test and the correlation analysis were used to determine the relationship strength of the variables examined.

Table 01. Description of the research sample

Summary Frequency Table Questionnaires Marked cells have counts > 10 (Marginal summaries are not marked)									
Designation of secondary schools	Mean Female	Mean Male	Missing Data	Row Totals					
Přerov-SPŠ-techlyc4	2	11	4	17					
Přerov-SPŠ-techlyc3	3	11	1	15					
Přerov-SPŠ-stroj4	4	16	2	22					
Přerov-SPŠ-elekt4	2	11	8	21					
Přerov-SPŠ-elekt3	6	20	5	31					
Prostějov-Podnik-maturitní-4	14	6	5	25					
Prostějov-OA-maturitní-4	15	0	8	23					
Prostějov-CyrilMet-gym-maturitní-8	3	0	2	5					
Prostějov-CyrilMet-gym-maturitní-7	1	1	0	2					
Olm-SŠobchAsluž-učební-3	18	0	29	47					
Olm-Církevgym-maturitní-4	4	4	18	26					
Olm-Církevgym-maturitní-3	0	2	2	4					
Hranice-Prům-maturitní-4	1	0	5	6					
Missing	0	0	0	0					
All Grps	73	82	89	244					

6.1. Coping strategies used by secondary school students (Table 02)

In the total sum (Table 02), predominantly positive coping strategies (POS, average 12.38) are used to resolve stress amongst Czech secondary school students in the Olomouc Region compared to negative strategies (NEG, average 11.62), But without any greater difference between the two values. Overall, students tend to use the strategies of the POS 3 group, i.e. the control strategy (Situation Check, Response Check, and Positive Self-Instruction).

Table 02.SVF 78 - Coping strategies used by secondary school students

Subtest	Valid N	Mean	Maximum	Std.Dev.
Underestimation	244	10.33	25.00	5.43
Rejection of guilt	244	10.25	25.00	5.01
Departure	244	12.76	26.00	5.29
Replacement satisfaction	244	12.68	26.00	5.99
Checking the situation	244	13.89	26.00	5.80
Control of reactions	244	13.58	26.00	5.37
Positive self-intrusion	244	13.19	26.00	5.85
Social support	244	12.34	27.00	6.83
Avoidance	244	12.92	26.00	6.10
Escape tendency	244	11.10	24.00	5.69
Perseverance	244	12.95	26.00	6.48
Resignation	244	10.38	26.00	5.44
Self-blaming	244	12.04	27.00	6.32
POS 1	244	10.29	25.00	4.67

POS 2	244	12.72	24.00	5.01
POS 3	244	13.55	25.33	5.03
POZ	244	12.38	21.71	4.13
NEG	244	11.62	22.50	5.09

Table 03.T-tests; Grouping: Gender (Questionnaire Zouharová) Group 1: Female Group 2: Male

Variable	Mean Female	Mean Male	t- value	df	р	Valid N Female	Valid N Male	Std.Dev. Female	Std.Dev. Male
Underestimation	8.23	11.80	-4.27	153	< 0.01	73	82	5.59	4.82
Rejection of guilt	9.36	10.51	-1.36	153	0.17	73	82	5.63	4.91
Departure	12.44	13.15	-0.82	153	0.42	73	82	5.86	4.94
Replacement satisfaction	12.23	12.91	-0.69	153	0.49	73	82	6.94	5.38
Checking the situation	13.64	14.28	-0.69	153	0.49	73	82	6.30	5.14
Control of reactions	13.41	13.66	-0.28	153	0.78	73	82	6.14	4.74
Positive self- intrusion	12.95	13.63	-0.72	153	0.47	73	82	6.58	5.33
Social support	14.08	11.00	2.70	153	0.01	73	82	7.47	6.75
Avoidance	11.84	13.94	-2.15	153	0.03	73	82	6.61	5.59
Escape tendency	11.33	11.27	0.06	153	0.95	73	82	6.31	5.84
Perseverance	12.85	12.90	-0.05	153	0.96	73	82	6.77	6.45
Resignation	10.67	10.29	0.41	153	0.68	73	82	6.32	5.22
Self-blaming	11.97	12.12	-0.15	153	0.88	73	82	6.96	5.49
POS 1	8.79	11.16	-3.15	153	< 0.01	73	82	5.12	4.22
POS 2	12.34	13.03	-0.85	153	0.39	73	82	5.63	4.49
POS 3	13.33	13.86	-0.65	153	0.52	73	82	5.88	4.07
POS	11.75	12.85	-1.69	153	0.09	73	82	4.89	3.11
NEG	11.71	11.65	0.07	153	0.94	73	82	5.84	4.68

6.2. Comparison of coping strategies of Czech secondary school students by gender (Table 03)

Of the positive strategies, boys use statistically significantly more POS1 (Under Evaluation, Rejection of Guilt) than girls and also achieved a slightly higher result than girls at POS 2 (Diversion, Replacement Satisfaction). For negative coping strategies, however, there is almost no difference between the sexes. Overall, however, there were no significant differences between coping strategies of boys and girls.

However, girls tend to use negative strategies (NEG, average 11.71) more than the Undervaluation and Devaluation Strategy (POS 1, average 8.79).

Girls use almost equally positive and negative coping strategies.

Table 04.T-tests; Grouping: Gender (Questionnaire Zouharová) Group 1: Female Group 2: Male

Variable	Mean Female	Mean Male	t- value	df	p	Valid N Female	Valid N Male	Std.Dev. Female	Std.Dev. Male
Self-spacing	22.85	23.60	-0.57	153	0.57	73	82	9.17	7.10
Self- overlapping	47.81	49.51	-0.83	153	0.41	73	82	13.28	12.38
Personality	70.66	73.11	-0.78	153	0.44	73	82	20.97	18.03
Freedom	34.42	37.10	-1.86	153	0.06	73	82	9.14	8.71
Responsibility	35.86	39.83	-2.01	153	0.05	73	82	12.54	11.96
Existentialism	70.29	76.93	-2.05	153	0.04	73	82	20.64	19.72
Total Score P+E	140.95	150.04	-1.49	153	0.14	73	82	40.44	35.62

6.3. Comparison of the ESK questionnaire for girls and boys (Table 04)

Boys achieved an overall higher average score not only in specific subtitles but also in the overall score of the questionnaire. On the basis of the results, boys have a statistically significantly higher ability to act actively and bear the consequences of their behaviour (Responsibility, average 39.83) than girls (average 35.86). In addition, the boys showed statistically significantly higher existentially and decisive, conscious involvement (E, mean 76.93) than the girls (average 70.29). Overall, boys showed a higher ability to experience the meaningfulness of their own existence (P + E, mean 150.04) than for girls (average 140.95) - but this difference was not statistically significant.

6.4. The relationship between choosing coping strategies and experiencing self-worth in secondary school students

The relationship between the choice of coping strategies and experiencing our own meaningfulness among Czech secondary school students was assessed by correlation of the results of SVF 78 (POS, NEG) and ESK (Total score). Overall, a higher correlation (r = 0.47) was shown only between positive coping strategies (POS) and the overall result of a personal, meaningful existence (Total score). The power of the relation is, however, only to a medium degree. Nevertheless, this correlation is higher than the correlation (r = 0.16) of Negative Strategies (NEG) and ESK of the Total Score scale, from which it can be concluded that a higher degree of personal meaningfulness has a greater impact on the use of positive coping strategies than negative ones.

Table 05.Gender=Female Correlations (Questionnaire Zouharová) Marked correlations are significant at p <0.05 N=73 (Casewise deletion of missing data)

Variable	Means	Std.Dev.	POS	NEG	Total Score P+E
POS	11.75	4.89	1.00	0.51	0.58
NEG	11.71	5.84	0.51	1.00	0.26
Total Score P+E	140.95	40.44	0.58	0.26	1.00

Table 06.Gender=Male Correlations (Questionnaire Zouharová) Marked correlations are significant at p < 0.05 N=82 (Casewise deletion of missing data)

Variable	Means	Std.Dev.	POS	NEG	Total Score P+E
POS	12.85	3.11	1.00	0.30	0.40
NEG	11.65	4.68	0.30	1.00	0.06
Total Score P+E	150.04	35.62	0.40	0.06	1.00

These tables (Table 05 and Table 06) show the differences between boys and girls for the above correlation (SVF 78 and ESK scale). Higher correlations (r = 0.58)were found among girls than boys (r = 0.40) between P + E and POS scores. Therefore, girls choose a positive coping strategy to help their personal sense of purpose.

An interesting result is that although a higher level of personal meaningfulness is confirmed among boys than girls, the relationship between personal meaningfulness and selection of coping strategies in stressful situations is less tight among boys (POZ r = 0.40 and NEG r = 0.06).

Table 07.T-tests; Grouping: Gender (Questionnaire Zouharová) Group 1: Female Group 2: Male

Table 07.1 tests, Grouping.	Mean	Mean	t-					Std.Dev.	
Variable	Female		value	df	p	Female		Female	Male
Stress-Spatial Area	2.40	2.22	0.80	153	0.42	73	82	1.52	1.25
Stress-Looking at yourself	2.70	2.41	1.40	153	0.16	73	82	1.38	1.25
Stress-Partner Area	2.66	2.34	1.44	153	0.15	73	82	1.44	1.34
Stress-Relationship to the Family	2.64	2.38	1.12	153	0.26	73	82	1.45	1.39
Stress-Study Area	3.24	2.78	2.27	153	0.02	73	82	1.24	1.30
Stress-Communicating with Humans	2.81	2.56	1.03	153	0.30	73	82	1.54	1.47
Stress-Communication with Teachers	2.89	2.60	1.16	153	0.25	73	82	1.52	1.58
Stress-Physical discontent	3.02	2.58	1.82	153	0.07	73	82	1.50	1.48
Stress – The World Area of Orientation in the World	2.97	2.65	1.36	153	0.18	73	82	1.53	1.45
Stress-Concerns from the Future	3.23	2.75	2.02	153	0.05	73	82	1.51	1.44
Stress-Economic Area	3.08	2.60	1.98	153	0.05	73	82	1.54	1.48
Stress-Total average score	2.81	2.49	1.56	153	0.12	73	82	1.32	1.21

6.5. Stressful factors among secondary school students (Table 07)

We were also interested in whether stressors in secondaryschool students were different between boys and girls. Based on the results using a comparison by t-test, girls experience higher stress levels in Studying (average 3.24) than boys (average 2.78), Fear of the Future (3.23, Men 2.75) as well as in the area Economic (average 3.08, male average 2.60).

For boys, higher stress levels than girls did not show separately in any area; the results are almost uniform and no area for them is a source of much higher stress than girls

Table 08.Correlations (Questionnaire Zouharová) Marked correlations are significant at p < 0.05 N=161 (Casewise deletion of missing data)]

Variable	Means	Std.Dev	S-S	S-O	P	F	R	E	Total Score P+E	Stress- Total average score
Self-spacingS-S	23.14	8.20	1.00	0.72	0.89	0.69	0.78	0.78	0.87	-0.56
Self-overlappingS-O	48.61	12.78	0.72	1.00	0.96	0.78	0.73	0.79	0.91	-0.58
Personality P	71.76	19.55	0.89	0.96	1.00	0.80	0.81	0.84	0.96	-0.61
FreedomF	35.76	9.03	0.69	0.78	0.80	1.00	0.82	0.94	0.91	-0.51
Responsibility R	37.81	12.53	0.78	0.73	0.81	0.82	1.00	0.97	0.93	-0.55
Existentialism E	73.57	20.62	0.78	0.79	0.84	0.94	0.97	1.00	0.96	-0.56
Total Score P+E	145.32	38.53	0.87	0.91	0.96	0.91	0.93	0.96	1.00	-0.61
Stress-Total average score	2.67	1.29	-0.56	-0.58	-0.61	-0.51	-0.55	-0.56	-0.61	1.00

6.6. Stress and existentialism (Table 08)

We were also curious whether the overall assessment of stress by secondary school students is related to their perception of the meaningfulness of their own existence. The results of the correlation analysis of the questionnaire results are shown in this table. The results obtained show that, with the rising overall score of perceived stress, at the same time, secondary school students perceive the sense of the meaning of their own existence (r = -0.61).

Table 09.Correlations (Questionnaire Zouharová) Marked correlations are significant at p < 0.05 N=73 (Casewise deletion of missing data) Include condition: Gender="Female"]

Variable	Means	Std.Dev.	S-S	S-P	P	F	R	E	Total Score P+E	Stress- Total average score
Stress-Total average score	2.81	1.32	1.00	-0.58	-0.62	-0.64	-0.56	-0.60	-0.61	-0.65
Self-spacing S-S	22.85	9.17	-0.58	1.00	0.74	0.90	0.73	0.84	0.84	0.90
Self-overlapping S-O	47.81	13.28	-0.62	0.74	1.00	0.96	0.83	0.75	0.83	0.92
Personality P	70.66	20.97	-0.64	0.90	0.96	1.00	0.85	0.85	0.89	0.97
Freedom F	34.42	9.14	-0.56	0.73	0.83	0.85	1.00	0.81	0.93	0.92
Responsibility R	35.86	12.54	-0.60	0.84	0.75	0.85	0.81	1.00	0.97	0.93
Existentialism E	70.29	20.64	-0.61	0.84	0.83	0.89	0.93	0.97	1.00	0.97
Total Score P+E	140.95	40.44	-0.65	0.90	0.92	0.97	0.92	0.93	0.97	1.00

Table 10.Correlations (Questionnaire Zouharová) Marked correlations are significant at p < 0.05 N=82 (Casewise deletion of missing data) Include condition: Gender="Male"]

Variable	Means	Std.Dev	S-S	S-O	P	F	R	E	Total Score P+E	Stress- Total average score
Stress-Total average score	2.49	1.21	1.00	-0.51	-0.52	-0.56	-0.42	-0.45	-0.46	-0.53
Self-spacingS-S	23.60	7.10	-0.51	1.00	0.69	0.87	0.62	0.70	0.70	0.83
Self- overlapping S-O	49.51	12.38	-0.52	0.69	1.00	0.96	0.71	0.69	0.74	0.89
Personality P	73.11	18.03	-0.56	0.87	0.96	1.00	0.73	0.75	0.78	0.94
FreedomF	37.10	8.71	-0.42	0.62	0.71	0.73	1.00	0.82	0.94	0.89
Responsibility R	39.83	11.96	-0.45	0.70	0.69	0.75	0.82	1.00	0.97	0.92
Existentialism E	76.93	19.72	-0.46	0.70	0.74	0.78	0.94	0.97	1.00	0.95
Total Score P+E	150.04	35.62	-0.53	0.83	0.89	0.94	0.89	0.92	0.95	1.00

It can be seen from the tables (Table 09. and Table 10.) that the tightness of the relationship between the perceived stress and the meaning of self-existence is higher for girls (r = -0.65) than for boys (r = -0.53). Thus, a higher level of stress in girls affects perceptions of the meaningfulness of life more than for theboys.

7. Conclusion

The results of the research carried out in the Olomouc Region among secondary school students can be compared not only with applicable standards but also with similar research studies. The results of the SVF 78 questionnaire and the Stress questionnaire are consistent with the current view that the relationship between stress and perceptions by gender is not entirely clear due to different lifestyles and other variables, as girls experience more stress in their lives than boys. In general, students tend to use the strategies of POS 3 (Situation Check, Response Check, and Positive Self-Instruction). As suggested by the results, girls unlike boys tend to use more negative strategies (NEG, average 11.70) than positive POZ 1 (average 8.79), which even worsens the situation they perceive as a burden (Table 03). They are more often inclined to escape from a stressful situation, which in the long run only increases their stress, as well as thinking about the stressful situation. They also have a greater tendency to give up (feelings of helplessness and hopelessness) and self-blame (inclination to dejection and self-accusation of errors). Boys more than girls use POZ 2 strategies (Deviation, Replacement Satisfaction). The areas that are most stressful for girls include school, fears of the future and the economic sphere (Table 07);among boys, no specific areas with higher stress levels were observed compared with girls. Furthermore, it has been shown that, girls unlike boys have reached a lower degree in experiencing the meaningfulness of their own existence, which decreases even more with increasing burdens (Table 04). There is no significant difference in the choice of coping strategies between boys and girls at the age of 18-20 (Table 03). The relationship between personal meaningfulness and selection of coping strategies in stressful situations is less tight among boys (POZ r = 0.40 and NEG r = 0.06).

8. Implications

Adolescents in Russian research most often choose a social support as a coping strategy. At the same time, this strategy reduces the dependence on parental support. As a second strategy, the strategy of control of the situation (average 10.8 - 12.2) and positive self-motivation (average 11.3 - 12.6), which converts to this research fall into category POZ 3 (Markova, Nikitskaya, 2013). Deyreh's research showed that it is more likely boys who choose rather a cognitive approach to the problem based on the higher liability level found in boys (t = 2.642, p < 0.009 at = 2.308, p < 0.022), rather than girls who tended to use ineffective strategies and feel more stressed than was absolutely necessary. For this reason, it is essential that psychologists and educators instruct girls, in particular, how they can deal with stress effectively (Deyreh, 2012). As some upper secondary students go on to become collegestudents, we will give some research results as an example. Stress management strategies practically do not differ, as they both use both the POZ and the NEG strategies, their preferences being in the strategies of POZ 1 and POZ 2. The use of the POZ 3 strategies is below the average. Furthermore, the results showed an increased need for social support. On a larger scale, students use strategies of avoidance, escape tendencies, resignation, and self-blaming. Girls tend to use substitution and diversion strategies, and boys prefer to underestimate themselves. Among boys, the level of guilt has also increased. The control strategy was identical between the two genders. As with secondary school students, women tended to use NEG negative strategies (Sigmund, Kvintová, Dostálová, 2013). Guszkowska's research results (2016) have shown that men prefer choosing management strategies, while women prefer focus-seeking strategies, both emotional and material, and put more emphasis on emotions and avoiding solutions (Guszkowska, 2016). The meaning in the life of secondary school students is not a negligible part of their lives, as according to the research by Eun-hyeCho (2014), meaning in life is an important precursor of adapting to the conditions of the secondary school and in dealing with stressful situations. Secondary school students who see meaning in their own lives are more likely to achieve their goals and focus on their intrinsic values, while actively engaging in problem-solving and adapting to school conditions and requirements more effectively (Eun-hyeCho et al., 2014). The results of the research highlight the growing need to teach pupils how to effectively tackle day-to-day problems, from which choices they can choose. This is particularly important for all those with behavioural or emotional disturbances, or aggressive or overclosure (Fernández-Baena, Trianes, Escobar et al., 2015).

Acknowledgments

The paper was supported by project Palacký University Olomouc IGA_PdF_2017_020 "Coping strategies and meaning of life among adolescents connected with education".

References

Brizio A. (2016). No more a child, not yet an adult»: studying social cognition in adolescence. *Frontiers in Psychology, 6*, 1—12.

Cho, E. -hye, Lee, D. -gwi, Lee, J. H., Bae, B. H., &Jeong, S. M. (2014). Meaning in Life and School Adjustment: Testing the Mediating Effects of Problem-focused Coping and Self-acceptance.

- ProcediaSocialand Behavioral Sciences, 114, 777-781. https://doi.org/10.1016/j.sbspro.2013.12.784
- Chrásková, M. & Kvintová, J. (2016). A Reflection of the Attitudes of Future Teachers to the Psychosocial Aspects of Health in Relation to their Coping Strategies. ICERI2016 Proceedings. Madrid: IATED. pp. 4606-4617. DOI 10.21125/iceri.2016.2092
- Deyreh, E. (2012).Comparison between High School Students in Cognitive and Affective Coping Strategies.Procedia Social and Behavioral Sciences, 46, 289-293. https://doi.org/10.1016/j.sbspro.2012.05.108
- Eppelmann, L., Parzer, P., Lenzen, C., Bürger, A., Haffner, J., Resch, F., &Kaess, M. (2016).Stress, coping and emotional and behavioural problemsamongGermanhighschoolstudents [Online].*MentalHealth*, 4(2), 81-87. https://doi.org/10.1016/j.mhp.2016.03.002
- Erikson, E. H. (2002). Dětství a společnost. Praha: ARGO.
- Fernández-Baena, F. J., Trianes, M. V., Escobar, M., Blanca, M. J., &Muñoz, Á. M. (2015).DailyStressors in PrimaryEducationStudents [Online]. *CanadianJournalofSchool Psychology*, 30(1), 22-33. https://doi.org/10.1177/0829573514548388
- Frankl, V. (2015). Lékařskápéče o duši (6ed.). Brno: Cesta Brno.
- Guszkowska, M., Zagórska-Pachucka, A., Kuk, A., &Skwarek, K. (2016).Gender as a factor in differentiating strategies of coping with stress used by physical education students. *Health Psychology Report*, *3*, 237-245. https://doi.org/10.5114/hpr.2016.57681
- Holton, M. K., Barry, A. E., & Chaney, J. D. (2015). Employee stress management: An examination of adaptive and maladaptive coping strategies on employee health. https://doi.org/10.3233/WOR-152145
- Janke, W., G. Erdmannová a J. Švancara (překl.)(2003). Strategiezvládánístresu- SVF 78.Praha: Testcentrum, s.r.o.
- Kholmogorova, A. B. (2016). Significance of Cultural-Historical Theory of Psychological Development of L.S. Vygotsky for the Development of Modern Models of Social Cognition and Psychotherapy. *Cultural-Historical Psychology*, 12(3), 58-92. https://doi.org/10.17759/chp.2016120305
- Kosová, M. (2014). Logoterapie: existenciálníanalýzajakohledánícest. Praha: Grada.
- Längle, A., Ch. Orglerová, M. Kundi a K. Balcar(překl.) (2001). ESK Existenciálníškála. Praha: Testcentrum, s.r.o.
- Lovenjak, I., & Peklaj, C. (2016). Stress and PerceptionofSchoolSatisfaction on a Sample ofSlovenePrimarySchoolStudents.PsihologijskeTeme / PsychologicalTopics, 25(3), 357-379.
- Machovec, M. (2012). Smysllidské existence (5 ed.). Czech Republic: Akropolis.
- Markova, S., &Nikitskaya, E. (2013). Coping strategies of adolescents with deviant behaviour. https://doi.org/10.1080/02673843.2013.868363
- Mark, G., & Smith, A. P. (2012). Occupational stress, job characteristics, coping, and the mental health of nurses. *British Journal of Health Psychology*, 17(3), 505-521, doi: 10.1111/j.2044-8287.2011.02051.x. Získáno z: http://onlinelibrary.wiley.com/doi/10.1111/j.2044-8287.2011.02051.x/pdf
- Maslow, A. (2014). O psychologiibytí (1sted.). Praha: Portál.
- Mayseless, O., &Keren, E. (2013). Finding a meaningful life as a developmental task in emerging adulthood: The domains of love and work across cultures. *Emerging Adulthood*, 2(1), 63-76.
- Novák, T. (2014). Tréma jak s níbojovat. Praha: Grada.
- Pelcák, S. (2013). Osobnostní nezdolnost a zdraví. Hradec Králové: Gaudeamus.
- Řehulka, E., &Řehulková, O. (Eds.). (2001). Psychologickéotázky adolescence: sborníkpříspěvků. Boskovice: Albert.
- Sanders, R. A. (2013). Adolescent psychosocial, social, and cognitive development. *Pediatrics in Review/American Academy of Pediatrics*, 34(8), 354-8.
- Sigmund, M., Kvintová, J., &Dostálová, I. (2013). Selected Personality Traits and Stress Management in Current University Students of Education, Physical Culture and Natural Science. *E-Pedagogium*, 2013(4), 43-60.