

STRESS EFFECT FACTORS AND SOCIO-PATHOLOGICAL PHENOMENA IN TEACHING AND LEARNING ENVIRONMENT

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Abstract: *Stress represents an inner human state in a positive or negative sense that can be considered a threat. From the researchers conducted in the Czech and Slovak Republic, it can be shown that adequate stress has a significant effect on brain activity. Stress in teaching and learning environment leads to the emergence and development of socio-pathological phenomena. Contributors focus on social, emotional and behaviour stress factors in pupils/students with an impact on the occurrence of socio-pathological phenomena and risk behaviours in the educational process. The main methods of realization of the empirical research were the questionnaire survey, the own structure of the contribution authors, the experiment method, the statistical method of the F-test of equivalence and the t-test with uneven dispersion. The authors of the paper further analysed the statements of teachers who reported the most frequent preferences of stress factors in students.*

Keywords: *Stress factors, social-pathological phenomena, educational process, stressors of high school student, student's soft-skills.*

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1. INTRODUCTION

The aim of this contribution is to identify and classify stress effect factors and stress situations of high school that are involved in formation of socio-pathological phenomena. Within the framework of experimental group have eliminated stress factors and evaluated to reduce the impact and dangerous consequences in behaviour, value orientation and adolescent attitudes.

In the theoretical-methodological part of the contribution are defined stress factors, stress situations, socio-pathological phenomena and teaching and learning environment.

In the analytic part of the contribution is focused on finding a statistical dependence on the presence of stress in teaching and learning environment, the behaviour of pupils the presence and stress effect factors in the educational process.

2. LITERATURE REVIEW

Scientific research of stress in various environments and connections dates back to the end of 1950's. Research of the stress was done by (Berg and Cornell, 2016), who were focusing on the job stress; manager's stress of teacher's profession and of teachers; strategies of coping with stress. Authors (Blašková, Blaško, Figurská and Sokol, 2015) concentrated on coping oriented on problem emotions and strategies. Next authors such as (Braun and Carlotto, 2014) dealt with the perception of stress situation by university students in Slovakia at the secondary school students. According to (Cefai and Camilleri, 2015) the research concentrated on diagnosis of factors of stress of adolescents at the age of 15 - 16. In the sample of 1648 students, he found out that adolescents are mostly threatened by psychical stress that was most commonly associated with examining, testing during classes or passing final examinations (Cordella and Pojani, 2014).

Cognitive strategies of success and stress factors (from disadvantaged family environment) were subjects of more important studies and researches and also programs in the USA in 1990's (see GED program PERRY intervention to school success of children from low-stimulating environment already in an early age). Many similar studies were dedicated to factors of coping and success (da Silva, Bolsoni, Rodriguess, Capellini et al., 2015) while they secondarily indicated stress as the factor of failure. The significant sample (75 students), how to say (Davies, Olson, Meyer, Renner et al., 2016) was monitored in the context of stress demonstrations in the sphere of transition of students to higher grade of education. The research of stress of students at the age of 10 - 11 who are making transition to higher grade of education was done in London by team of experts from Karagiannopoulou. Students from families that were categorically classified as coherent and adaptable have experienced stress resulting from transition to higher degree only exceptionally (Denscombe, 2000). On the contrary students from families characterized as unbalanced (chaotic, rigid) were experiencing stress more often even in the second period of school year (Eldor, 2018). Murberg's research took place in Norway, 535 high school students at the age of 13 - 16 went through the research. On the basis of his extensive study he grouped the stress in areas to discover everyday stress present in the common activity in the class (Eva and Thayer, 2017) and (Fisher, 2011). By means of questionnaire and consecutive interview with 50 elementary school students at the age of 8 - 9 in England and Greece they gathered information that students link the everyday stress to teacher's rebuke of undisciplined student, teacher's feedback on student's work with many errors and too student's inability to answer teacher's questions. The participants were 384 Greek primary schoolteachers, aged 25 to 59 years old (mean age = 41 years and 4 months), 146 males (38 %) and 238 females (62 %). They completed the Questionnaire on Teacher Stress and

the Maslach Burnout Inventory - Educators Survey - MBI-ES. It was found that Greek primary schoolteachers report low levels of stress and that their stress is predicted by burnout and teaching students with special educational needs mention (Folkman and Lazarus, 1980) and (Gabrhelová, 2017). Reviewing a selection of the literature published after (Gaillior and Baumeister, 2007) seminal review on the impact to stress on close relationships this review conceptualizes to associations between different types of stressors – particularly those that originate outside (external) and inside (internal) relationship but relationship satisfaction within romantic too. The stressor is the situation to which the individual is being exposed and in order to face it, he has to adapt by (Ganzel, Morris and Wethington, 2010).

Mention division of stressors in those primaries, i.e. those that affect organism directly and those secondary that bring obstacles during the activity. The influence of stress on the person does not need to have only negative character. Universities form the intellectual level and motivation of all individuals and groups in the country; speak authors (Gouda, Luong, Schmidt and Bauer, 2016). Consequences of student's stress are reflected in every component of student's personality; inform (Grise-Owens, Miller, Escobar Ratliff and George, 2018). It is reflected mostly on human's health, comments (Gustems, Carnicer, Calderón and Calderón Garrido, 2019). The most common symptoms of student's stress that can be perceived by teacher are fatigue, exhaustion, headache, problems with stomach, signs of depression, change of dietary habits and weight loss (Havelka, Kropáč, Serafin, Chráska et al., 2015). Behavioural symptoms are represented by addictions, smoking, abnormal workout, and irrationality losing nerves“, inabilities to concentrate, inability to complete a task, mention (Hong, 2012).

Stress is closely related to the way of life that student leads, expresses (Hutkemri Ahmad and Jelas, 2017). When student experiences long-term inadequate big stress and he is not able to copy with it, it can be associated with smoking, excessive consumption of alcohol, lack of exercise etc. Research done by Mederi and coll. proves that 61 % of secondary school students consider school environment as an environment that stresses them, what is a high occurrence compared to other types of environment (20.36 % none, 11.13 % family, 7.23 % outside of family and school, 1 % not indicated), say (Inmaculada and Glòria, 2016). On 10 283 addressed respondents the authors have investigated determinants that have negative influence on well-being of high school students, adds (Kalyva, 2013). It resulted from the realized research that students with a bad well-being smoke regularly, they drink coffee and beer almost daily, they take medicine for stimulation and calming down, they have already took drugs, or they take drugs regularly, they miss confidential person when solving problems and relationships, think (Kandlhofer and Steinbauer, 2016) and (Kopp, Kuhlmann and Goppelwar, 2016), they have suicidal tendencies or they have already tried to commit a suicide, they have already had sexual intercourse and they now have a sexual life. For this period indicate the following possible stress factors: continuing with education (Lai and Kwan, 2017), leaving parents' house, intimate relationships with the opposite sex, conclusion of the marriage, planning of the family, birth of children, professional growth, and unemployment. Significant factors that are stressing for students are presented in didactical-methodical work of the teacher (form of communication, methods, and way of evaluation, problem solving and educational climate), say (Lawner and Bradbury, 2017).

The relation between school climate and resilience of students is confirmed by the research authors (Leach, Nygaard, Chipman, Brunsvold et al., 2019) and (Lin and Huang, 2014). The authors found out that there is a relation between the level of resilience of students and their perception of school climate.

3. MATERIAL AND METHODS

We have differentiated investigation of stress and socio-pathological phenomena into three fields: within the first part we were investigating and making diagnose of high school student's stress factors and determinants, in the second part we made a long-term experimental research in selected research universe and third part in intentions of recommendations for pedagogical practice we have focused on programs of elimination of stress from the point of view of teacher's support of student when dealing with social-emotional symptoms. Main methods for realization of empirical investigation were the questionnaire of the own construction, method of experiment, statistical method F-test for equality of variances and t-test with unequal variance. By the F-test, we decide whether the experimental intervention has an influence on the variability (scattering s_2^2) of the random variable under investigation. We test the zero hypotheses in the F-test: $H_0: s_1^2 = s_2^2$ and compare with the critical value:

If $F > F_{krit}$. \Rightarrow reject the zero hypotheses $H_0: s_1^2 = s_2^2$. The scattering of both files differs statistically significantly, i.e. the selections come from two different basic sets with different variations of s_1^2 and s_2^2 , ($p < 0.05$ (or $p < 0.01$ according to the chosen significance level α)).

If $F < F_{krit}$. \Rightarrow We cannot reject the hypothesis H_0 . The scattering of both sets is not statistically significantly different, i.e. the selections come from the same basic set with a common scattering s_2^2 , ($p > 0.05$). The objective of the F-test on the Equivalence of Two Scatters is to verify whether the sample sets originate from the distribution with the same scatter, i.e. whether the files show approximately the same dispersion of the observed random variable.

The objective of the contribution was to identify and classify stressors, stress situations of high school that are involved in formation of socio-pathological phenomena. Within the framework of experimental group have eliminated stress factors and evaluated to reduce the impact and dangerous consequences in behaviour, value orientation and adolescent attitudes.

4. RESULTS AND DISCUSSION

4.1. Stressors of High School Students

We were finding out stressors and starters of stress at high school students through questionnaire method with open items. By analysing statements of respondents ($N = 298$) we have processed proportional overview of most frequently mentioned stressors oral and written testing (26.47 %), bullying (17.05 %), teacher (16.60 %), bad grades (8.83 %), inability to integrate (7.47 %), expectations of parents (5.48 %), weak family social background (4.87 %), student's failure (4.41 %), not managing schoolwork (4.57 %), disinterest in study (4.26 %). When making qualitative analysis of all gathered data it is possible to segment stated items of respondents into more fields of stressors of student, e.g. examining of students (20.67 %), results of learning of students (19.6 %), personality of teacher (17.81 %), social-pathological phenomenon's (16.15 %), social relationships in class (13.18 %), personality of student (12.59 %).

We have processed framework groups on the basis of number of their occurrence. A most source of stress is considered examining and testing of knowledge of students. Manner in which teacher verifies knowledge and teacher's skills are evaluated as stressful. A significant number of teachers stated that students are stressed by oral testing, performing in front of all group of students, project presentation. The important factor of education is teacher and his methodical-didactical

approach. Teacher's influencing of student is a broad scale activity, etc. motivation manner, quality of pedagogical communication, say (Meriläinen, 2014), level of interactions, form and manner of mediation of housework, possibility of knowledge testing, evaluation manner, approach to student, respecting principles etc. In our work we indicate evaluation of teacher as a potential source of stress for student are for examples ridiculing and humiliating (19.17 %), strict behaviour (13.15 %), high demands on student (12.33 %), non objective evaluation (10.68 %), behaviour - stressed, moody, not calm (9.32 %), picking on a student (8.77 %), cries, insults, vulgarisms (8.22 %), teacher's dominance (6.85 %), disregard (6.30 %), excessive testing (5.21 %).

In the view of stress experienced in school conditions we have to make appeal to the fact that in many cases it can develop into socio-pathological phenomena and improper manifestation of behaviour, inform (Özberk, Dağlı, Altınay and Altınay, 2017). Secondary school students most frequently experience bullying, aggressive behaviour, alcohol, smoking, drugs, contemporary phenomenon of bullying and cyber-bullying, add (Prilleltensky, Neff and Bessell, 2016). Important part of quality of student's life at school is positive experiencing of interactions in class on the level teacher-student, student-student and student-group. Student's social competences must be appreciated in every activity within the framework of education as well as during events organised by school, agree (Randall and Bodenmann, 2017). The most stressful for high school students is their inability to become integrated in group. From the point of view of student's personality stressors are failure, disinterest in studies, schoolwork and weak social family environment, think (Reichl, Wach, Spinath Brünken and Karbach, 2014).

4.2. Stress Effect Factors and Social-Pathological Phenomena in Teaching and Learning Environment

The second part of the research was focused on finding a statistical dependence on the presence of stress in teaching and learning environment and the occurrence of socio-pathological phenomena, and whether the behaviour of pupils with socio-pathological manifestations has been reinforced by the presence and stress effect factors in the educational process.

The analysis was performed by standard statistic methods, expressing the significance of the difference between the obtained numerical data representing the variables entering the relations. To a successful and relevant course of the experiment, two almost identical groups of pupils from secondary schools from the Slovak Republic were chosen and monitored throughout the school year. It is difficult to create a purely random sample. For that reason, we worked with completed classes of boys of the same age and similar level. Sample selection was focused on comparability of relevant features relevant to the research, i.e. the same conditions for both groups in terms of material security and also in terms of the skills and expertise of teachers who were of the same age and gender, and who worked by different methods during the experiment. Pupils of the sample attended the same secondary school, the same year and completed the same curriculum with the same hour duration. Verification of specified hypotheses was performed by a special experimental plan.

The processing, evaluation and analysis of the data obtained was processed using standard methods of mathematical statistics to determine the impact of school stress and the incidence of socio-pathological phenomena in teaching and learning environment. To verify the level of stress factors on the sample of pupils involved in the experiment, we used a questionnaire to determine the extent of stress factors on pupils. According to (Roslan, Sharifach and Thirumalai, 2012) the rate of representation of pathological phenomena was determined by a pedagogical experiment in

which the control group provided educational conditions without the influence of stress factors; they were exposed to a minimal extent. The experimental group was subjected to stress factors during contact education.

H1 hypothesis stated: Pupils exposed to stress factors in teaching and learning environment do not achieve a lower incidence of socio-pathological phenomena compared to pupils in teaching and learning environment of contact education without stress activity. To verify the assumed hypothesis, assuming that the distribution of the samples is approximately normal, we used statistical methods: F-test for equality of variances that would assess the difference between the variances. Variable $F = \sigma_1^2 / \sigma_2^2$ was the test criterion. Its comparison with the critical value at the significance level of $\alpha = 0.05$ would define and assess the results. Further, a sample t-test was used with inequality of variance at the significance levels of $\alpha = 0.05$ and $\alpha = 0.01$. To verify the values, non-parametric Wilcoxon test (Mann – Whitney U-test) was used.

Table 1. Results of empirical research
Source: Authors.

Pupil's number	Group without stress factors	Group with stress factors
1	49	48
2	36	49
3	39	38
4	49	32
5	43	35
6	37	36
7	39	39
8	5	41
9	28	29
10	48	48
11	35	47
12	45	36
13	29	29
14	41	39
15	34	45
16	3	46
17	33	47
18	42	39
19	12	50
20	34	35
21	29	26
22	31	39
23	33	40
24	24	36
25	42	43
26	41	44
27	43	32
28	47	46

Pupil's number	Group without stress factors	Group with stress factors
29	34	45
30	35	47
31	26	35
32	36	36
33	50	8
34	41	37
35	38	32
36	40	45
37	24	48
38	29	49
39	34	46
40	42	38
41	29	39
42	31	36
43	32	32
44	26	35
45	29	34
46	34	49
47	27	40
48	41	21
49	35	35
50	36	38
51	40	37
52	42	39
53	24	42
54	18	46
55	43	45
56	37	37
57	34	36
58	32	39
59	29	46
60	40	44
61	36	43
62	35	50
63	27	47
64	42	48
65	38	41
66	36	39
67	39	40
68	25	38
69	32	34
70	21	35
71	41	32

Table 1 shows the results obtained from the research survey for both groups of pupils, one group of pupils being exposed to a stress factors in teaching and learning environment, while the other group was not, or the effects of stressors were minimized. F-test for equality of variances found a difference between the parameter variations. Tested value was $F = \sigma_1^2 / \sigma_2^2$, compared to the critical value at the significance level of $\alpha = 0.05$, entered into MS Excel, reported the statistics as described in table 2. Value of tested criterion was calculated $F = 1.557437553$, while the critical value $F_{crit.} = 1.485688974$, meaning. $F > F_{crit.}$, as predicted. Since the calculated F value is greater than the critical value, the difference between variances is considered to be statistically significant and therefore, for the comparison of the mean values, we have chosen a two-sample t-test with variance inequality.

Table 2. Statistics of the two-sample F-test at the level of significance $\alpha = 0.05$.

Source: Authors.

Two-sample F-test of the variance	Sample 1	Sample 2
Mean value	34.23943662	39.3943662
Variance	82.69899396	53.09939638
Observation	71	71
Difference	70	70
F	1.557437553	
P(F<=f) (1)	0.032933546	
F crit (1)	1.485688974	

Sample t-test with inequality of variance at two significance level $\alpha = 0.05$ and $\alpha = 0.01$; Basic characteristics of the sample were calculated using MS Excel at the significance level of $\alpha = 0.05$ – see Table 3.

Table 3. Statistics of the two-sample t-test with inequality of variance by Excel at the significance level of $\alpha = 0.05$. Source: Authors.

Two-sample t-test with inequality of variance	Sample 1	Sample 2
Mean value	34.23943662	39.3943662
Variance	82.69899396	53.09939638
Observation	71	71
Difference of mean values	0	
Difference	134	
t stat	-3.727387976	
P(T<=t) (1)	0.000142192	
t crit (1)	1.656304542	
P(T<=t) (2)	0.000284383	
t crit (2)	1.97782573	

Test value was calculated as $t = -3.727387976$ by comparing this value with the critical values of the two-sample t-test $t_{crit1.} = 1.656304542$ and $t_{crit2.} = 1.97782573$ revealed that $|t| > t_{crit.}$, meaning that the mean number of points of both samples are not equal at the level of significance of $\alpha = 0.05$.

Table 4. Statistics of the two-sample t-test with inequality of variance at the level of significance of $\alpha = 0.01$. Source: Authors.

Two-sample t-test with inequality of variance	Sample 1	Sample 2
Mean value	34.23943662	39.3943662
Variance	82.69899396	53.09939638
Observation	71	71
Difference of mean values	0	
Difference	134	
t stat	-3.727387976	
P(T<=t) (1)	0.000142192	
t crit (1)	2.354498123	
P(T<=t) (2)	0.000284383	
t crit (2)	2.613017054	

Test value was calculated as $t = -3.727387976$. By comparing this value with the critical values of the two-sample $t_{crit1} = 2.354498123$ and $t_{crit2} = 2.613017054$ revealed that $|t| > t_{krit}$, meaning that the mean number of points of both samples are not equal at the level of significance of $\alpha = 0.01$. To verify the hypothesis at the level of significance of $\alpha = 0.05$ and $\alpha = 0.01$ Wilcoxon test (Mann – Whitney U-test) was used, see Table 5.

Table 5. Statistics of Wilcoxon test (Mann – Whitney U-test). Source: Authors.

Experiment	Obtained points	Order for calculation	Auxiliary field	Experiment	Obtained points	Order for calculation	Auxiliary field
aa	3	1	1	A	38	74.5	73
aa	5	2	2	B	38	74.5	74
bb	8	3	3	B	38	74.5	75
aa	12	4	4	B	38	74.5	76
aa	18	5	5	B	38	74.5	77
aa	21	6.5	6	a	39	85	78
bb	21	6.5	7	a	39	85	79
aa	24	9	8	a	39	85	80
aa	24	9	9	b	39	85	81
aa	24	9	10	b	39	85	82
aa	25	11	11	b	39	85	83
aa	26	13	12	b	39	85	84
aa	26	13	13	b	39	85	85
bb	26	13	14	b	39	85	86
aa	27	15.5	15	b	39	85	87
aa	27	15.5	16	b	39	85	88
aa	28	17	17	a	40	91.5	89
aa	29	21.5	18	a	40	91.5	90
aa	29	21.5	19	a	40	91.5	91
aa	29	21.5	20	b	40	91.5	92
aa	29	21.5	21	b	40	91.5	93
aa	29	21.5	22	b	40	91.5	94
aa	29	21.5	23	a	41	98	95

Experiment	Obtained points	Order for calculation	Auxiliary field	Experiment	Obtained points	Order for calculation	Auxiliary field
bb	29	21.5	24	a	41	98	96
bb	29	21.5	25	a	41	98	97
aa	31	26.5	26	a	41	98	98
aa	31	26.5	27	a	41	98	99
aa	32	31.5	28	b	41	98	100
aa	32	31.5	29	b	41	98	101
aa	32	31.5	30	a	42	104.5	102
bb	32	31.5	31	a	42	104.5	103
bb	32	31.5	32	a	42	104.5	104
bb	32	31.5	33	a	42	104.5	105
bb	32	31.5	34	a	42	104.5	106
bb	32	31.5	35	b	42	104.5	107
aa	33	36.5	36	a	43	110	108
aa	33	36.5	37	a	43	110	109
aa	34	41.5	38	a	43	110	110
aa	34	41.5	39	b	43	110	111
aa	34	41.5	40	b	43	110	112
aa	34	41.5	41	b	44	113.5	113
aa	34	41.5	42	b	44	113.5	114
aa	34	41.5	43	a	45	117	115
bb	34	41.5	44	b	45	117	116
bb	34	41.5	45	b	45	117	117
aa	35	50.5	46	b	45	117	118
aa	35	50.5	47	b	45	117	119
aa	35	50.5	48	b	46	122	120
aa	35	50.5	49	b	46	122	121
b	35	50.5	50	b	46	122	122
bb	35	50.5	51	b	46	122	123
bb	35	50.5	52	b	46	122	124
bb	35	50.5	53	a	47	127	125
bb	35	50.5	54	b	47	127	126
bb	35	50.5	55	b	47	127	127
ba	36	61	56	b	47	127	128
aa	36	61	57	b	47	127	129
aa	36	61	58	a	48	132	130
aa	36	61	59	b	48	132	131
aa	36	61	60	b	48	132	132
ab	36	61	61	b	48	132	133
bb	36	61	62	b	48	132	134
bb	36	61	63	a	49	137	135
bb	36	61	64	a	49	137	136
bb	36	61	65	b	49	137	137
bb	36	61	66	b	49	137	138
aa	37	69	67	b	49	137	139
aa	37	69	68	a	50	141	140
bb	37	69	69	b	50	141	141
bb	37	69	70	b	50	141	142

Based on table 5 of the values of Wilcoxon test (Mann – Whitney U-test), $U_0 = -3,7230351$ critical values u_α : for $p < 0.05 = 1.96$, for $p < 0, 01 = 2, 58$ at the significance level was calculated.

Using statistical methods and the values, we confirmed H1 hypothesis $|U_0| > U_\alpha$

4.3. Student's Soft-Skills a Stress at School

Analysing and detecting stressful situations and stress triggering in pupils in school conditions requires the elaboration of possible proposals to eliminate stress factors that negatively affect pupils' performance in achieving success as well as educational behaviours (Sadeghi and Sa'adat-pourvahid, 2016). In the current pedagogical discourse, the concept of soft skills, which needs to be developed and promoted in school, comes to the attention. The teacher's job is to recognize and work with pupils' stressors (Schmidt, Klusmann, Lüdtke, Möller et al., 2017).

Dealing with stress is in literature on psychology described called coping. This term means both intra-psycho and intentional effort to manage, tolerate, and reduce internal and external human requirements, comment (Shankar and Park, 2016). These are extremely demanding requirements, which burden and exceed the resources available to a person. There are several classifications and categorizations of coping behaviour and coping strategies (Shatkin, Diamond, Zhao, Chodaczech et al., 2017). Based on multiple classification types of coping strategies and their orientation, they have agreed on problem solving, emotion management, and escape responses, escape, eviction, use of soothing substances, denial of the situation, and similar. This type of reaction, compared to the previous two, which are very effective, is rarely adaptable. Coping strategies include religion, mental disconnection, acceptance, searching for instrumental, social or emotional support, behavioural shutdown, humour, alcohol and drug use, problem solving planning, active coping, coping suppression, attention, backsliding, self-confrontation, confrontational dealing with stress, blaming others, finding positive aspects of the process, taking personal responsibility for dealing with the situation, self-control, trying to avoid and escaping stress, resignation, monitoring (tendency to search for threats) and others. Coping strategies represent certain behaviours in various stressful situations. Stress reduction resources are addictive, transitive, relatively consistent patterns of management at the behavioural, cognitive or experience levels that individual uses when dealing with internal or external stressors. The repertoire of ways to eliminate stress effectively includes time management, social support, appropriate eating habits, relaxation (e.g. yoga, Macháček's relaxation-activation method, Schultz's autogenous training, Jacobson's progressive relaxation, meditation, biofeedback, massage, wellness, lightning relaxation techniques), say (Singh, 2016), art and music therapy, dance and motion therapy, breathing exercises, positive thoughts and others.

In the context of dealing with stressful situations and stress, we emphasize the ability of the learner to self-regulate, which is understood as the roof concept of self-control representing the ability of an individual to modify the behaviour and adapt it to certain requirements. Self-control can be explained as the effort the pupil spends in controlling their thinking, behaviour, feeling and doing so in accordance with social norms, cultures, ideals, or personal goals. A person who wants to cope with a stressful situation has to master the control of ideas, emotions and block the excitement. It is the regulation of emotions, impulses and behaviour that are the main areas of self-control. The suppression or complete blocking of an experienced tendency to behave with aggressive individuals corresponds to understanding the concept of self-control which is defined in the present psychology as the ability of an individual to overcome or abolish inappropriate behavioural tendencies and withdraw from their realization. It is activated in situations where there is an internal conflict between behavioural tendencies originating from the inside or caused by actual stimulation

and distant goals, environmental requirements (Slavich, 2016). According to (Sonntag, 2009) of aggression the self-control should be suppressing the tendency to hurt another person. Support, development and change of soft skills, such as empathy, ability to communicate and teamwork, self-discipline and ability to enroll in school conditions require a planned and long-term activity (Sotardi, 2016). Ability to self-identify, self-control in the interaction of relationships and the environment represents a lifelong journey of personality development. The source of acquiring the first skills to self-recovering one's identity is family. A continuing institution in this direction is school. As we cannot provide "perfect" conditions for socio-emotional development to all parents and families, teachers are also different in socio-emotional competence. Since the school is a professional institution for teachers, a great number of programs, training for the development and maintenance of the pupil's social competencies are being prepared, inform (Sticke and Scott, 2016) and (Tumer and Muholland, 2017). Based on research, stress is a part of the life of individuals (teachers and pupils) in teaching and the learning environment add (Wilkes, Kydd, Sagar and Broadbent, 2017). Authors (Yusofov, Nicoloro, Grey, Moyer et al., 2019) believe that developing soft skills of pupils is a natural prevention to tackle stressful situations. In order to strengthen the soft skills of pupils, it is necessary to support and focus the attention of the teachers themselves.

5. FUTURE RESEARCH DIRECTIONS

Another potential future research could be to identify the causes of stress or burnout in teachers. The aim would be to identify these negative factors and try to eliminate them. This could outline possible solutions to suppress or completely prevent the causes of stress in educational institutions. Changes in social life such as aggression, violence, bullying, etc. are very common today. So who is responsible for the causes of excessive stress and negative behaviour in children or adolescents? This may also outline further possible research. However, culture and morality play an important role in suppressing congenital aggression. Researchers on which this research would be carried out should be not only from the Czech and Slovak Republics, but also from other European countries.

6. CONCLUSION

The given study presents theoretical analysis of stress, stressors of high school students and the consequent empirical investigation. The objective was to analyse the most frequent reasons or starters of high school student's stress from the point of view of teachers. By comparing statements of teachers, we have processed sequence of most frequently mentioned stressors of students. We have focused on searching for mutual dependence on stress and socio-pathological phenomena and verification of stated hypothesis. Making diagnose and evaluation of stress of student requires application of teacher's competences in multispectral influence. After diagnosis and consequent evaluation, the pedagogical reality requires teacher to work with students in order to eliminate and manage student's potential and real stress.

Ability of self-knowledge, self-control in interaction of relationships and environment represents lifelong journey of personality development. As well as physical, human and social capital can significantly contribute to increased productivity of individuals, groups and organizations. Family is the source where we acquire first skills in order to form the own identity. The school continues in this influence. As well as we cannot ensure „perfect“ conditions for social-emotional development for all parents and families, also teachers have different level of social-emotional competences. Since school is the professional institution, in last year's there were prepared many programmes, trainings for development and keeping of social competences of student for teachers. The GED study (Generalized Educational Development) made by Hackman in the1990's in the USA con-

firmed that graduates of GED program missed psychological dispositions gained by high school students in the process of regular education. The GED program served as a test in order to get certificate on maturity exam also to easing and undisciplined students on the basis of their success in test. According to the program they were to the large extent „speculators missing ability to think systematically, to bear tasks, to adapt on the environment and to cope with stress.

Time management is an integral part of prevention of stress and stress situations, emotional control, aggressive motives or temperament. An important role in the prevention of academic stressors is the open, cultivated communication between pupils and pupils and teachers involved in creating a social climate and a favourable atmosphere. With respect to trends and developments in the area of information and communication technologies, mobile applications focusing on relaxation, sporting activities, planning and organizing time and communicating with friends support the management of stressful situations. Mobile Applications Pacific offers cognitive behavioural therapies, meditation, relaxation exercises and breathing to relieve anxiety and stress. It contains more than 25 sound exercises including breathing, relaxing muscles or tuning for positive thinking. The Calmit application, with the subtitle Meditate, offers users primarily meditation exercises, such as sleeping stories, the most common fairy tales for adults to reassure Google Calendar, Trello or Any. Do are application-oriented programming and time management dedicated to managing, performing tasks and responsibilities. Endomondo, Runtastic, Diet applications motivate users to use GPS to create route maps, track distance, speed, average and maximum pace and speed including calories burned. Communication applications with friends as like Messenger, Viber and Skype support day-to-day interpersonal communication.

Building upon above mentioned researches the stress is part of life of individuals (teachers and students) in school environment. The necessary social but also professional condition is to teach students to work with stress factors and to develop their competences and skills in order to deal with difficult situations. Contributors believe that the development of stressful situations, misunderstandings and conflicts often found in non-homogeneous groups and social communities can be avoided in particular by developing soft skills for pupils and students through open communication, regular planning and timing with support for movement, relaxation and meditation activities. In order to strengthen soft skills for pupils and students, it is necessary to pay attention to all participants of the academic environment, to harmonize interpersonal relationships, to sophisticate culture, trust, coordination and motivation in a functional educational process.

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