

ADOLESCENTS' SELF-REPORT ON THE USE AND HELPFULNESS OF STRESS COPING STRATEGIES

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Abstract

The article presents the results of the first stage of the Latvia-Lithuania cross-border project “Developing of Social Psychological Support Service System through Implementation of Method of Positive Coping Strategies and Enhancement of Social Inclusion for People in Vulnerable Groups” (POZCOPING), in which, based on the adolescents' self-report and using the methodology (Adolescent Coping Scale) developed by *Freidenberg* and *Lewis*, stress-causing problems and the use and helpfulness of stress coping strategies of adolescents in Latvia were identified and analysed.

Keywords: *adolescents, stress, stress coping strategies, distress.*

Introduction

School is an environment where an adolescent's personality is shaped, a place where they face many difficulties, which can lead to deep emotional traumas. It can take different forms in behaviour – closing off from others or open aggressive behaviour, which in turn indicates an adolescent's increased stress level.

Adolescence is a significant growth and development stage, which marks a period of transition from childhood to adulthood. It is one of the most important stages in every person's life, when rapid changes both physically and psychologically take place (*Srivastava & Kiran, 2015*). In psychology adolescence staging is not uniform; the staging is based on just one criterion: puberty, psychosexual development, or changes in primary activity and interests. These processes significantly affect adolescents' development. Adolescents' nervous system has specific functional features, which reflect in increased excitability, hyperactivity, emotional lability. Psychologists explain it with a shift of cortical and subcortical activity balance, activation of subcortical activity in puberty. As a result, inhibition processes in the brain become slower, while more active processes are triggered (*Goloveij & Rybalko, 2006*). In Latvia *Elkonin's (2007)* adolescence staging is used more often: younger adolescent (aged 11-14) and older adolescent (aged 15-17), which is based on the changes of primary activity and interests. Each of the stages has its own conditions that create the adolescents' self-image and ability to trust someone else (capability of intimacy). These processes are complex and contradictory.

Stress is a major source of many issues in adolescence, and it can be caused by low self-esteem, insufficient stress management and problem-solving skills that consequently can cause many psychological problems, for instance, depression, anxiety, emotional outbreaks, high-risk behaviour, school leaving, running away from home, suicidal thoughts (Srivastava & Kiran, 2015; Bauwens & Hourcade, 1992).

In this age both serious troubles, difficulties and simple insults can be the cause of stress. One of the psychological peculiarities of an adolescent is that any moral trauma becomes large-scale. An adolescent lives with an increased stress level due to physiological, psychological, social changes.

The aim of the article is to present the results of the first stage of the Latvia-Lithuania cross-border project “Developing of Social Psychological Support Service System through Implementation of Method of Positive Coping Strategies and Enhancement of Social Inclusion for People in Vulnerable Groups” (POZCOPING) on stress-causing problems, the use and helpfulness of stress coping strategies of adolescents in Latvia.

The aim of the article is to analyze adolescents’ stress-causing problems, strategies for stress coping used in their solution and their effectiveness depending on the profile of respondents (gender and age), as well as to identify the resources for the improvement of positive, productive and long-term stress management strategies and stress reduction by using adolescents’ self-report.

Literature Review

Stress is an individual’s indirectly assessed response of interaction between a personality and the world around (Lazarus & Folkman, 1984). This response is a product of cognitive processes, mind-set, situation assessment, awareness of one’s own resources, existence and adequate choice of stress management types and strategies.

Although studies on stress have been carried out for a long time, awareness of it has changed over time, and nowadays the cognitive aspect is decisive. Selje (2011) defined it as a body’s response to an external stimulus. The concept of stress as a transactional process emphasizes the relation between the objective stressor and the resulting tension. Within the context of this concept, stress can be divided into the following categories:

- stress related to threatening situations (stressors);
- stress as an individual’s subjective interpretation of threatening situations (threats);
- stress as an emotional state, caused by threatening situations (Škuškovnika, Tiltiņa-Kapele, & Dudkina, 2014).

Particular importance is given to cognitive stress assessment. Stress is not just facing an objective stimulus; the decisive factor is an individual’s assessment of stress. Stress is being studied as a result of the subjective assessment of an irritant (stressor) with a special focus on two cognitive processes: assessment and coping. Assessment means identification of a value or a quality of something, while coping is making behavioural and cognitive efforts for meeting external and internal needs (Lazarus & Avervill, 1972).

The term “coping” first appeared in the psychological literature in 1962. Murphy (1962) used this term to describe how children overcome developmental crisis. This term is defined as an attempt to solve a certain problem.

Lazarus and Folkman (1984) use this term to describe intentional stress coping strategies. Coping is triggered when the complexity of tasks exceeds the energy output of normal reactions; new options are required as the usual adaptation is insufficient. Coping is

an action taken by an individual to overcome stress. This term includes cognitive, emotional and behavioural strategies, which are used for meeting daily life demands. Thus, the function of coping is to destroy the connection of stress between a personality and a surrounding environment, to control emotional stress.

A person begins to form stress coping strategies very early, along with the development of cognitive processes, particularly, reasoning. Certain strategies are already formed in adolescence and used by an adolescent for coping with stress. These strategies are formed during observation of parents, other adults, in other words, by learning indirectly. Bandura (1986) and his colleagues, developing social learning theory, claimed that behaviour is a result of interaction between cognitive processes and an impact of the surrounding environment. People learn behaviour by observing, reading or even hearing about the behaviour of other people. Social learning theory is also referred to as observational learning, as in this case the focus is on the significance of modelling and imitation of other people's behaviour, attitude and emotional reaction. Behaviour modelling process constitutes of separate components: paying attention, retention of the observed, reproduction and motivation. Any behaviour is caused by something, but a person can control his/her behaviour, is able to take creative decisions due to reasoning. Changing behaviour is possible by changing perception of the surrounding and learning new behaviour models.

Stress is vital for human survival and is a natural protective reaction of human body, which helps to avoid life threatening situations. Although reasonable stress level is assessed positively, the impact of distress or negative stress increases, which can cause not only emotional, but also physiological changes in the body and contribute to the development of illnesses. Moreover, during prolonged distress, body's recovery, which is a significant prerequisite for health, deactivates.

An experimental research (Lee et al., 2017) confirmed that the resources available to adolescents affect the choice of stress management strategy – resilient adolescents simultaneously used not only problem-oriented but also emotion-oriented stress coping strategies, a competent group mostly used problem solving, while a struggling group mostly used emotion-oriented strategies; the adolescents of vulnerable group used neither problem-oriented, nor emotion-oriented strategies.

Vygotsky (1982), writing about adolescence, determined several adolescents' dominants of interests: an egocentric dominant – interest in himself/herself, his/her own personality; a distance dominant – thoughts, wishes related to future, which are more important than the current life; an effort dominant – a wish to overcome difficulties, to prove to himself/herself and others, which sometimes turns into stubbornness, obstinacy, protest; a romantic dominant – striving for the unknown, risky, adventurous. These dominants of interests can cause stress, increase it and direct towards selection of a certain stress management strategy.

Adolescents' stress may be indicated by various physiological symptoms, for instance, frequent common colds, complaints about frequent abdominal pains or headaches, changes in eating habits – loss of appetite, overeating, as well as sleep disorders, increased tiredness and frequent urination. Adolescents' stress may also be indicated by such behaviour signs as frequent mood swings, rage issues and different socialization issues, including emotional changes – apathy, persistent annoyance, sadness, as well as reduced cognitive abilities, which cause an inability to acquire and perceive learning material, difficulties to make decisions. In addition, adolescents are no longer able to cope with responsibilities, which they were able to fulfil previously.

In adolescence all impacts experienced previously in emotional, cognitive and social sphere appear. The greater mistakes were made in preceding development periods, the more difficult are the relationships with an adolescent in this period. Adolescents' behaviour and emotional disorders reflect all flaws of society and family like a mirror (Goloveij & Rybalko, 2006). Rapid changes in physical, cognitive, emotional and psychological development and their acceptance and overcoming can cause stress, as an adolescent develops personality and identity, personal values are shaped, desire for autonomy appears (Schraml et al., 2011). Adolescents live in contradictions. They can simultaneously have a desire for self-assertion, independence, and lack of faith in themselves, a desire to be together with those who are similar and the need to be alone; they can be abrupt, rude and easily offended, or shy, which is often the reason for such ways of self-assertion as bravado, ease, lack of discipline, conflicts with adults, spitefulness and negativity.

Stress occurs most frequently in daily interaction with people around: misunderstanding in relationships with peers or family, learning achievements, building or losing friendships, financial and social status, etc. It is highlighted in the literature (Roets & Lewis, 2002) that adults do not always pay attention to adolescents' stress and insufficiently assess possible negative consequences, if an adolescent does not learn to solve problems. Without learning positive strategies for stress mitigation, adolescents might start to use alcohol, drugs, while prolonged stress can cause serious health problems, such as high blood pressure, cardiac disease (Roets & Lewis, 2002; Ames et al., 2005).

Dragunova (1973), studying adolescent growth, divide it into several types. One of the types is imitation of adults' appearance. Such imitation is not always positive, as the decisive factor is to become an adult quickly and easily. Stress situations are also solved based on the adult model – by smoking, using alcohol, having easy and fun lifestyle. An adolescent observes such coping strategies in adult society, yet not all adolescents, observing such behaviour, imitate it. It is related to cognitive and moral development of an adolescent. Social learning mechanism – imitation – is not a simple copying. An adolescent is an active being, affecting the surrounding environment and being affected by the surrounding environment. An adolescent chooses what he/she will imitate, based on his/her comprehension of the situation, of himself/herself, a future vision.

Research Methodology

In the first research stage the adolescents of Latgale region were offered to participate in the survey. 371 adolescents aged 11 to 17 – 162 boys and 208 girls – made use of this opportunity.

The research procedure was performed in accordance with the requirements of the LR normative acts – the Physical Data Processing Law on the Data Processing for Scientific Research Purposes in the Official Publication (Physical Person Data Processing Law, 2018) and the Law of Psychologists on Integrity as a Basic Principle of the Psychologist's Professional Activity, Respecting and Promoting Integrity in the Scientific and Academic Action of Psychology (Law of Psychologists, 2017).

The consent of the parents and the adolescents was obtained for the survey. Based on Curtis' (2015) study, adolescents were divided into two groups according to their age: 11-13 years (younger adolescent, primary activity – communication) and 14-17-year old adolescents (primary activity – learning – professional activity). 175 or 47.2 % of the adolescents were in the younger group, the others were in the 2nd group.

The long form of the Adolescent Coping Scale Second Edition (ACS-2) translated into the Latvian language was used for the survey. The translation was agreed with an expert – a psychologist – and before starting the survey, it was tried on a small group of 14 adolescents.

In the survey, the adolescents were invited to do the following:

- 1) name a problem that creates stress;
- 2) assess 60 statements which indicate the use of problem/stress coping strategies (how often these are used) and their effectiveness (how often a particular behaviour helps).

The results on the use and effectiveness of the following strategies were summarized:

- Social support – tendency to discuss problems with others and include the support into overcoming the problem.
- Work hard and achieve – obligations, determination (for success), and diligence.
- Worry – concern about the future in general or, more specifically, concern about future happiness.
- Wishful thinking – hoping for a positive outcome.
- Social action – allowing others to find out what creates concern and including support, for example, collecting signatures or organizing such activities as meetings or campaigns.
- Self-blame – an individual believes that they are to blame for causing problems or concerns.
- Keeping to yourself – an individual avoids others and wishes to keep their concerns to themselves.
- Seeking spiritual support – prayer and belief in the help of a spiritual leader or God.
- Focusing on the positive – a positive and cheerful view on life, focusing on the good things in the individual's life.
- Seeking professional help – turning to a professional adviser, such as a teacher or a counsellor.
- Relaxing diversions – rest in general (does not include sports). This implies leisure activities such as watching TV, reading, and painting.
- Physical recreation – doing sports and keeping yourself in shape.
- Venting your anger – an attempt to feel better by damaging objects or insulting others.
- Humour – entertaining others.
- Not overcoming – individual is unable to overcome the problem, and psychosomatic symptoms appear.
- Accepting best effort – recognizing that you have done your best and there is nothing else left to do.
- Ignoring the problem – intentional blocking of the problem and stepping away from it, accepting that there is no way of overcoming it.
- Investing into close friendship – engaging in especially close relationships.
- Focusing on solving the problem – solving the problem systematically, exploring it, reviewing different aspects and possibilities.
- Tension reduction – an attempt to feel better by venting, crying, yelling, consuming alcohol, cigarettes, or drugs.

Mixed method approach was applied in data processing, ensuring triangulation. The responses to an open question regarding the stress-causing problem were coded, based on the developed code system including respondents' codes, profile codes and content codes, using the qualitative data processing program AQUAD in order to obtain secondary research data.

The assessment of stress coping strategy use and effectiveness was performed in accordance with the methodology designed by the Australian Council for Educational

Research, obtaining a total number of points for each strategy and calculating the adjusted result. The coding of the adjusted result for the statements chosen by the adolescents for the assessment of the *Use* and *Effectiveness* is based on the interpretation of adjusted results offered in the methodology (see Table 1) using the Likert scale as well as using the Mann-Whitney U test programmes for quantitative data processing in the SPSS environment, the statistical significance of the differences was determined according to the respondents' profile.

Table 1. Adjusted Result Interpretation

Adjusted Result Interval	20-30	31-49	50-70	71-89	90-100
Meaning	Never	Rarely	Sometimes	Often	Very Often

The data was processed using SPSS 22.0 software. At the beginning of the data processing, Cronbach's alpha coefficient for testing internal consistency was calculated, and the result obtained ($\alpha=.830$) testifies to good internal consistency.

Research Results

The following adolescents' problem groups were identified as a result of an open question analysis.

- 1) learning process, mentioning both concerns about achievements in a certain subject, year-end examinations, and academic achievements in general;
- 2) achievements in other fields, which are indirectly related to the learning process (for instance, participation in concerts, results of sports competitions, etc.);
- 3) relationships with peers;
- 4) issues in family (health, finances, etc.) and mutual relationships between family members;
- 5) health;
- 6) appearance;
- 7) future opportunities;
- 8) fear of punishments;
- 9) other (answers, which are mentioned once or do not fit in any of the previously mentioned groups).

Adolescents named both one and several problems that concern them. In the responses of the adolescents, problems related to learning convincingly predominate (mentioned in 263 or 70.9 % of cases). The other problem groups are mentioned less often (see Figure 1). It is possible that such result is affected by the fact that the survey has been carried out in a school environment under the guidance of school support staff (in volunteer status within the project). Considering that no differences based on the age were identified in adolescents' indicated problems ($p>0.05$), it can be concluded that the indicated problems are topical to all age groups. The obtained results regarding academic achievements as a source of stress are similar to the results of the researches in other countries (Chiang, 1995; Zimmer-Gembeck & Skinner, 2008). The problem had long been known, as in the research carried out in the USA in the last century it was concluded that 42 % of adolescents worry about studies every day, the rest of the participants – at least once a week (de Anda et al., 1997). This is an alarming statistic, as academic stress significantly affects adolescents' quality of sleep, causing a number of health issues (Yan, 2018; Matthews et al., 2016).

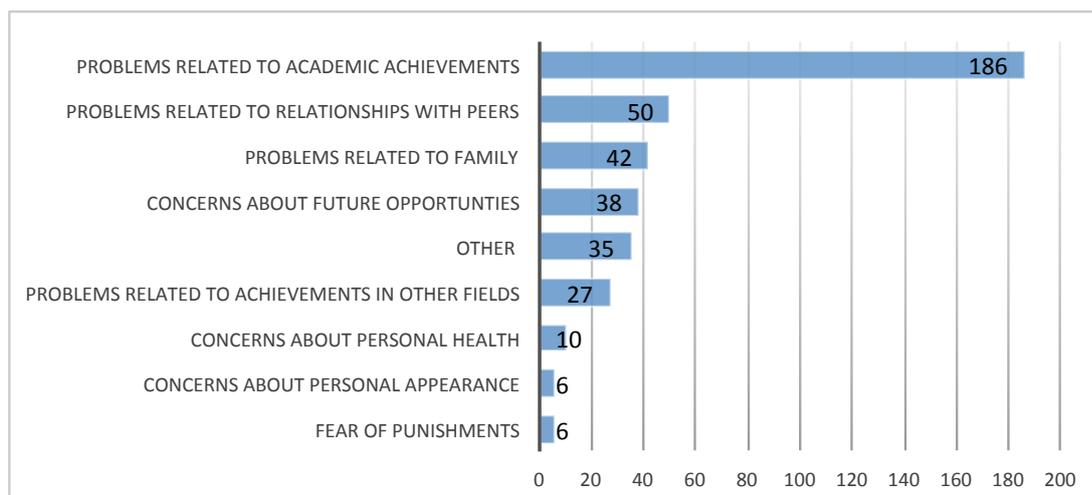


Fig. 1. Adolescents' identified stress-causing problems (number of cases)

Physiological development progresses faster in girls than in boys. The changes in the body create impulsivity, mood swings, and arguments with other people. The study published in 2016 by Stanford University Medical Center (Stanford University Medical Center, 2016) on the effect of traumatic stress on boys and girls (aged 9-17) states that the part of the brain responsible for emotions and actions (receives signals from the body, emotionally reacts and sympathizes), reacts faster and stronger in girls.

Problems in relationships with peers concern girls more (Mean Rank 193.42) than boys (Mean Rank 176.54), the difference ($p=.026$) is significant.

Depending on the adolescents' group, a significant difference ($p=.024$) in problem identification was found in the adolescents' assessments of concern about future opportunities: adolescents aged 14 to 17 think and worry about future opportunities more (Mean Rank 193.13) than adolescents aged 11 to 13 (Mean Rank 178.02). This difference describes the adolescents' development. For the older adolescents, the remoteness dominant (Vygotsky, 1982) is current, thoughts about life in the future are stronger than present life.

Research results regarding the adolescents' frequency of use of stress coping strategies show that such stress coping strategies as Relaxing Diversions, Wishful Thinking, as well as Work Hard and Achieve are used among the adolescents most frequently, while Seek Professional Help, Social Action and Tension Reduction are used less frequently. Relatively frequently stress is kept to oneself.

As a result of the Mann-Whitney U test, in the assessments of the stress coping strategy use of the adolescents involved in the study, statistically significant differences were found depending on the age group of the respondents. The responses of the adolescents involved in the study indicate that adolescents aged 11 to 13 more often choose the strategies *Seeking Spiritual Support* ($p=.004$) and *Social Support* ($p=.025$). This means that the younger adolescent in difficult moments still acts as a child, seeking help from someone who might be able to help. Whereas adolescents aged 14 to 17 more often prefer the strategies *Venting your Anger* ($p=.007$), *Tension Reduction* ($p=.002$), and *Not Overcoming* ($p=.013$). With the increasing understanding of oneself increases the desire to be self-sufficient, independent, to solve problems like an adult. However, psychological instability creates behavioural extremes: open, expressive display of negative emotions or shutting oneself off, suppressing, withholding emotions.

As a result of the Mann-Whitney U test, statistically significant differences were also found for the use of 14 strategies depending on the respondent's gender (see Table 2). These differences reflect the behaviour models formed in society for women and men. As a result of socialization and upbringing, the adolescent has acquired this gender-stereotypical behaviour and applies it in their everyday life.

Table 2. Differences According to Adolescents' Gender in Responses on the Use of Stress Coping Strategies

Strategy	p	Mean	Std.D	Mean Rank	
				Boys	Girls
Social Support	.047	3.256	.8679	174.36	195.12
Work Hard and Achieve	.006	3.337	.7220	201.74	173.66
Worry	.000	3.364	.9269	161.63	205.10
Wishful Thinking	.033	3.367	.9839	173.22	196.02
Self-blame	.001	2.868	1.0787	166.56	201.23
Seeking Spiritual Support	.012	1.660	1.1975	170.75	197.95
Focusing on the Positive	.001	3.186	.8513	205.49	170.73
Relaxing Diversions	.006	3.531	.9478	202.22	173.29
Physical Recreation	.000	3.323	1.0944	215.47	162.90
Humour	.001	3.329	.9724	205.84	170.45
Not Overcoming	.000	2.267	.8801	164.89	202.54
Investing into Close Friendship	.013	3.019	.9312	200.77	174.42
Focusing on Solving the Problem	.014	3.186	.7729	200.12	174.93
Tension Reduction	.000	1.701	.9209	159.43	206.82

The data obtained in the research show that Latvian adolescents use more than one strategy. Similar data are reflected in other studies as well (Donaldson & Prinstein, et al., 2000). Such researchers' recognized strategies as Hard Work or Problem-Solving (Frydenberg & Lewis, 2004), Physical Activity (Donaldson & Prinstein et al., 2000), as well as such less effective strategy as Self-Blame are used for problem mitigation. Differences based on the age allow assuming that, with age, most of adolescents develop their coping skills, frequently using productive long-term stress coping strategies.

The adolescents' choice of a stress coping strategy depends on the context. In school or home environment, adolescents use such stress coping strategies as Active Solution, as well as Search for Information, Emotion and Social Support more frequently rather than regarding health, where more frequently not only Active Solution, but also Concealing the Problem and Passivity is used; adolescents use the last two stress coping strategies in school environment less frequently. Overall, regardless of the context, most frequently used stress coping strategies are Active Solution and Emotion, less frequently used – Behavioural Avoidance and Passivity. The aforementioned strategies are used in situations, when adolescents believe that they have less freedom to act and they are dependent on the adults' decisions (Morales Rodríguez et al., 2016).

Researches show that the adolescents' level of stress related to parents is significantly higher than the level of stress related to peers, but they work on stress related to parents less actively if compared to stress related to peers (Persike & Seiffge-Krenke, 2016).

The adolescents assess Social Support, Physical Recreation, Relaxing Diversions and Humour as the most helpful stress coping strategies, while the less helpful strategies, in their opinion, are Tension Reduction, Social Action and Act Up.

As a result of the Mann-Whitney U test, statistically significant differences were found depending on the age group of the respondents in the assessment of the stress coping strategy effectiveness. Adolescents aged 11 to 13 consider the following strategies to be effective: *Seeking Spiritual Support* ($p=.001$) and *Focusing on the Positive* ($p=.045$). Whereas 14 to 17 years old adolescents in the assessment of stress coping strategy effectiveness prefer the strategies *Tension Reduction* ($p=.008$) and *Venting your Anger* ($p=.038$). In the effectiveness assessment, as well as in the use data, the differences indicate the differences in development of the adolescents. The older adolescents believe in themselves more, have better self-control and desire to be free from external control. This increases sensitivity, susceptibility to negative influence, thus under high tension adolescents are still unable to regulate their emotions and vent on those who happen to be nearby at the moment.

As a result of the Mann-Whitney U test, statistically significant differences were found depending on the gender of the respondents in the responses on the effectiveness of 7 stress coping strategies (see Table 3). These seven strategies again reflect the typical male problem solving behaviour accepted in society. In all the cases, with the exception of the strategy *Tension Reduction*, the mean rank is higher for boys. Hormones are what determines the functioning of the sense organs, regulates language and speech. These differences in boys and girls create differences in the action motivation and understanding of situations, emotional reactions; the styles of memorizing information and skill acquisition approaches are different. Boys are usually oriented at dynamic processes, problem solving, proving their ability. Girls in stress situations reduce tension by crying, speaking about the problem with someone close.

Table 3. Differences According to Adolescents' Gender in Responses on the Effectiveness of Stress Coping Strategies

Strategy	p	Mean	Std.D	Mean Rank	
				Boys	Girls
Work Hard and Achieve	.001	3.213	,8386	206.41	170.01
Keeping to Yourself	.003	2.795	,9676	203.73	172.11
Relaxing Diversions	.000	3.270	1,0463	214.09	163.99
Physical Recreation	.000	3.372	1,1134	214.64	163.55
Humour	.001	3.226	1,0717	206.70	169.78
Investing into Close Friendship	.035	3.030	1,0302	198.60	176.13
Tension Reduction	.000	1.755	1,1279	162.83	204.16

Criticism of stagnation in the conceptualization and methods in the newest studies (Compas et al., 2017) as well as the research results obtained justify the necessity for the design of a new methodology and approbation for the development of adolescent stress coping skills, which is planned at the next stage of the project. Based on the results of the 1st stage of the study, within the framework of the project, a methodology for promoting positive stress coping strategies in adolescents will be designed and tested in an experimental study, their dynamics and tendencies will be analysed in the future studies.

Since for adolescents the choice of stress coping strategies is affected by cultural and regional differences (Persike & Seiffge-Krenke, 2016), in the next comparative study results in Latvia and Lithuania will be analysed.

Conclusions

- The large proportion of problems related to the education system, the school environment and the academic achievement assessment system among adolescents justify the necessity to turn to interdisciplinary studies in this field, in the future involving psychology, education, healthcare, welfare and other specialists in longitudinal comparative studies after the implementation of the new competency-based education content model, which will ensure greater integration of academic subjects, allowing academic subject teachers to give more attention to the development of transversal skills, and will also change the assessment system, stressing both the process and the result of the teaching process.
- Most often adolescents use the positive stress coping strategies (relaxing diversions, work hard and achieve, humour, physical recreation, social support, etc.) and consider these the most effective, however not all possible resources are used in stress management, and the range of stress coping strategies the adolescents possess is relatively limited. Adolescents, progressing into further stages of development and accumulating experience, develop their increasing abstract thinking and self-reflection skills, and these skills allow more effective control of stress perception and regulation of subsequent actions, allowing to use a greater variety of and more effective problem solutions (Hess et al., 2017).
- Since one of the most effective active problem solving strategies is related to high adaptation and psychological fitness (Morales-Rodríguez et al., 2012; Seiffe-Krenke et al., 2012), but teachers admit that they find it difficult to work with adolescents at the individual, personal level (Rou et al., 2016), more attention should be given in school to the issues of adaptation, communication, creation of trusting relationships, providing support for increasing the psychological capital of adolescents as an effective stress management resource (Gautam & Pradhan, 2018).



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References

- Ames, S. C., Offord, K. P., Nirelli, L. M., Patten, C. A., Friedrich, W. N., Decker, P. A., & Hurt R. D. (2005). Initial development of a new measure of minor stress for adolescents: the adolescent minor stress inventory. *Journal of Youth and Adolescence*, 34(3), 207-219.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, New York: Prentice Hall.
- Bauwens, J., & Hourcade, J. S. (1992). School-based sources of stress among elementary and secondary at-risk students. *The School Counselor*, 40(2), 97-102.
- Chiang, C. X. (1995). A Study of Stress Reactions among Adolescents. *Chinese Journal of School Health*, 26, 33-37.
- Compas, B. E., Jaser, S. S., Bettis, A. H., Kelly, H. Watson, K. H., Gruhn, M. A., Dunbar, J. F., Williams, E.,

- Jennifer, C., & Thigpen J. C. (2017). Coping, Emotion Regulation, and Psychopathology in Childhood and Adolescence: A Meta-Analysis and Narrative Review. *Psychological Bulletin*, 143(9), 939–991.
- Curtis, A. C. (2015). Defining adolescence. *Journal of Adolescent and Family Health*, 7(2). Retrieved from: <https://scholar.utc.edu/jafh/vol7/iss2/2>
- De Anda, D., Bradley, M., Collada, C., Dunn, L., Kubota, J., Hollister, V., Miltenberger, J., Pulley, J., Susskind, A., Thompson, L. A., & Wadsworth, T. (1997). A study of stress, stressors, and coping strategies among middle school adolescents. *Social Work in Education*, 19(2), 87-98.
- Donaldson, D., Prinstein, M. J., Danovsky, M., & Spirito, A. (2000). Patterns of children's coping with life stress: Implications for clinicians. *American Journal of Orthopsychiatry*, 70 (3), 351- 359.
- Elkonin, D. B. (2007). *Detskaja psihologija. Ucheb. posobije dlja stud. Vysh.ucheb.zavedeniji [Child Psychology. Study book for students]*. Moskva, Akademija
- Frydenberg, E., Lewis, R., Bugalski, K., Cotta, A., McCarthy, C., Luscombe-Smith, N., & Poole, C. (2004). Prevention is better than cure: Coping skills training for adolescents at school. *Educational Psychology in Practice*, 20(2), 117-134.
- Gautam, P., & Pradhan, M. (2018). Psychological capital as moderator of stress and achievement. *Indian Journal of Positive Psychology*, 9(1), 22-28.
- Goloveij, L. A. & Rybalko, Y. F. (2006). *Praktika po vozrastnoj psihologii [A Practice on Developmental Psychology]*. Sankt-Peterburg, Rech.
- Hess, R. H., Shannon, C. R., & Glazier, R. P. (2017). Evidence-Based Interventions for Stress in Children and Adolescents. In L.A. Theodore (Ed.), *Handbook of Evidence-Based Interventions for Children and Adolescence* (pp. 343-354). New York: Springer.
- Lazarus, R. S., & Avervill, J. R. (1972). Emotion and cognition: with special reference to anxiety. In Spielberger C. D. (Ed.), *Anxiety. Current Trends in Theory and Research*, 2, New York: Academic Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publisher Company, Inc.
- Lee, J. H., Seo, M., Lee, M., Park, S. Y., & Lee, S. M. (2017). Profiles of Coping Strategies in Resilient Adolescents. *Psychological Reports*, 120(1), 49–69.
- Matthews, K. A., Hall, M. H., Cousins, J., & Lee, L. (2016). Getting a Good Night's Sleep in Adolescence: Do Strategies for Coping with Stress Matter? *Behavioral Sleep Medicine*, 14, 367-377.
- Morales, R. F. M., & Trianes, M. V. (2012). *Afrontamiento en la infancia [Coping in Childhood]*, Málaga: Aljibe.
- Morales, R. F. M., Trianes, T. M. V., Páez, J. M., & Inglés, C. J. (2016). Prevalence of strategies for coping with daily stress in children. *Psicothema*, 28(4), 370-376.
- Murphy, L. B. (1962). *The widening world of childhood: Paths toward maturity*. Oxford, UK: Basic Books.
- Persike, M., & Seiffge-Krenke, I. (2016). Stress with parents and peers: how adolescents from 18 nations cope with relationship stress. *Anxiety, Stress, Coping*, 29(1), 38–59.
- Roets, H. E., & Lewis, A. (2002). Notes on adolescent stress for parents, teachers and educational psychologists. *Educare*, 31 (1&2), 202-217.
- Roy, K., Ganesh Kamath, V., Kamath, A., Hegde, A., Johnson, A., & Ashok, L. (2016). Effectiveness of Life Skill Training Program on Stress among Adolescents at a School Setting. *Journal of Indian Association for Child and Adolescent Mental Health*, 12(4), 309-322.
- Schraml, K., Perski, A., Grossi, G., & Simonsson-Sarnecki, M. (2011). Stress symptoms among adolescents: The role of subjective psychosocial conditions, lifestyle, and self-esteem. *Journal of Adolescence*. 34, 987-996.
- Seiffe-Krenke, I., Persike, M., Chau, C., Hendry, L. B., Kloepf, M., Terzini-Hollar, M., Tam, V., Rodriguez Naranjo, C., Herrera, D., Menna, P., Rohail, I., Veisson, M., Hoareau, E., Luwe, M., Loncaric, D., Hyeyoun, H., & Regusch, L. (2012). Differences in agency? How adolescents from 18 countries perceive and cope with their futures. *International Journal of Behavioral Development*, 36, 258-270.
- Selje, H. (2011). *Manas dzīves stress [Stress of my Life]*. Rīga: Jumava.
- Srivastava, P., & Kiran, M. (2015). The Relationship between Perceived Stress, Self Esteem, Way of

- Coping and Problem Solving Ability among School Going Adolescents. *Journal of Psychosocial Research*, 10(2), 199-209.
- Škuškovnika, D., Tiltiņa-Kapele, I., & Dudkina A. (2014). *Trauksme un agresija. Korekcijas iespējas [Anxiety and aggression. The opportunities of correction]*. Rīga, Zinātne.
- Stanford University Medical Center. (2016). *Traumatic stress changes brains of boys, girls differently*. Science Bulletin, Nov. 11. Retrieved from <http://sciencebulletin.org/archives/7715.html>
- Vygotsky, L. S. (1982). *Sobraniye sochineniy v 6 tomakh [Collected works in 6 volumes]*, 4. Moskva.
- Yan, Y., Lin, R., Su, Y., & Liu, M. (2018). The Relationship between adolescent academic stress and sleep quality: a multiple mediation model. *Social behavior and personality*, 46 (1), 63–78. DOI: <https://doi.org/10.2224/sbp.6530>
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents coping with stress: Development and diversity. Approximately 25% of adolescents will experience at least one significant stressor, including the death of a loved one or witnessing a traumatic event. *The Prevention Researcher* 15(4). Retrieved from: <https://www.pdx.edu/sites/www.pdx.edu/psy/files/15-4-Zimmer-Gembeck-E.pdf>

ADOLESCENTS' SELF-REPORT ON USE AND HELPFULNESS OF STRESS COPING STRATEGIES

Summary

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The article presents the results of the first stage of the Latvia-Lithuania cross-border project “Developing of Social Psychological Support Service System through Implementation of Method of Positive Coping Strategies and Enhancement of Social Inclusion for People in Vulnerable Groups” (POZCOPING), in which, based on the adolescents’ self-report and using the methodology (Adolescent Coping Scale) developed by *Freidenberg* and *Lewis*, stress-causing problems and the use and helpfulness of stress coping strategies of adolescents’ in Latvia were identified and analysed.

The aim of the research: to analyse the adolescents’ stress-causing problems in Latvia and the use and helpfulness of stress coping strategies identified within the Latvia-Lithuania cross-border project “Developing of Social Psychological Support Service System through Implementation of Method of Positive Coping Strategies and Enhancement of Social Inclusion for People in Vulnerable Groups” (POZCOPING).

371 adolescents aged 11 to 17 years participated in the survey. The Long Form of the Adolescent Coping Scale – Second Edition (ACS-2) has been applied for the questionnaire. A mixed method approach was used in data processing, ensuring triangulation. The responses to an open question regarding the stress-causing problem were coded, based on the developed code system including respondents’ codes, profile codes and content codes, using the qualitative data processing program AQUAD in order to obtain secondary research data. While the assessment of the use and helpfulness of stress coping strategies has been carried out in accordance with the methodology developed by the Australian Council for Educational Research, using Likert Scale, as well as the Mann-Whitney U test for quantitative data processing in the SPSS environment, the statistical significance of differences based on the respondents’ profile were identified.

The problems related to the learning process prevail convincingly among the identified problems (mentioned in 263 cases or by 70.9 % of adolescents). This is an alarming statistic, as academic stress

significantly affects adolescents' quality of sleep, causing a number of health problems (Yan, 2018; Matthews et al., 2016).

The responses regarding the use of the selected stress coping strategies show that Latvian adolescents use more than one strategy. Such stress coping strategies as Relaxing Diversions (Mean 3.531), Wishful Thinking (Mean 3.567), as well as Worry (Mean Rank 3.364) and Work Hard and Achieve (Mean 3.337) are predominant, while less frequently used strategies are Seeking Professional Help (Mean 1.660), Social Action (1.650) and Tension Reduction (Mean 1.701). Relatively frequently stress is kept to oneself (Mean 3.326). Social Support (Mean 3.296), Physical Recreation (Mean 3.372), Relaxing Diversions (Mean 3.270) and Humour (Mean 3.226) are assessed by the adolescents as the most helpful stress coping strategies, while the less helpful strategies, in their opinion, are Tension Reduction (Mean 1.755) and Social Action (Mean 1.784).

It is concluded that not all possible resources are used in stress management, and the range of stress management strategies managed by adolescents is rather limited. The obtained results justify the necessity to develop and approbate a new methodology for the development of adolescents' stress management skills.

The number of problems related to the educational system, school environment and the system of academic achievements' assessment identified among the adolescents urges to address this issue in interdisciplinary studies in this field, where specialists in the field of psychology, education, health, welfare, etc. would seek for a solution. It would therefore be advisable to carry out a longitudinal comparative study after the implementation of a new competence-based educational content model, which will ensure a greater integration of school subjects, allowing subject teachers to pay more attention to the development of transversal skills, and will change the assessment system, focusing on both the result of the learning process and the process itself.

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