

SOCIALLY RESPONSIBLE BEHAVIOR AGAINST STRESS IN ELEMENTARY SCHOOL

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Abstract: In paper some theoretical concepts will be presented about creative environment in elementary schools for innovativeness and values to support this. Environment in elementary school should support development of requisitely holistically educated persons, capable to create and innovate. Creativity is not only a precondition for developed society; it is also a basic human need. Development of creativity takes place in sensitive and emotionally supportive environment. Studying the relation of elementary school students towards stress we established, that elementary school today has many difficulties to perform this task. Many elementary school students experience their school as the most important hindering fact: stress. Some definitions of stress will be presented and the relation of elementary school students towards it. For empirical research a questionnaire was developed and applied in one of the city elementary schools. The responses of the students of eighth and ninth grade will be presented and a comparative analysis with major stress factors for young in literature surveyed.

Keywords: stress, elementary school students, creative processes, innovativeness, social responsibility

DRUŽBENO ODGOVORNO VEDENJE ZOPER STRES V OSNOVNI ŠOLI

Povzetek: V prispevku bomo predstavili nekaj teoretičnih pojmov o ustvarjalnem okolju v osnovnih šolah za inovativnost, in vrednote, ki to podpirajo. Osnovno šolsko okolje bi naj omogočalo razvoj potrebno celovito izobraženih osebnosti sposobnih ustvarjanja in inoviranja. Ustvarjalnost ni le pogoj za razvito družbo, je tudi človekova osnovna potreba. Razvoj ustvarjalne klime poteka le v skrbnem in čustveno podpornem okolju. Po preučevanju stresa in odnosa osnovnošolcev do stres smo ugotovili, da osnovna šola danes težko opravlja to nalogo. Mnogi učenci osnovnih šol občutijo svojo šolo kot najpomembnejši stresor - dejavnik, ki močno ovira njihovo ustvarjalnost. Predstavili bomo nekaj opredelitev stresa in odnos učencev osnovnih šol do njega. Za empirični del raziskave je bila razvit vprašalnik za anketiranje učencev osmega in devetega razreda v eni od osnovnih šol v mestu. Predstavili bomo odgovore in njihovo primerjalno analizo z največjimi stresnimi dejavniki za mlade iz preučene literature.

Ključne besede: stres, osnovnošolci, ustvarjalni procesi, inovativnost, družbena odgovornost

1. Introduction – importance of education for social and economic life

The vast importance of educational system emerges from the simple fact: the majority of young people enter the educational system in their early ages and are socially modified for many years. In developed societies more resources are allocated to education and vocational training. Compared to the Japanese and American models of education one common characteristic for European schools could be found: they are encouraging a constant moral judgments, training students to be constructively critical (Ženko, 1999). Later in this paper we will see, that this characteristic could belong to reasons for stress in elementary schools. In complex global environment

with shorter products' and services' life expectancies knowledge supplemented with creativity is vitally important. Children are very creative in their early stages of life, before they enter formal education. 90% of the children at the age of 5 years are creative while only 10% at the age of 17 and after that only 5 % are (Likar and Fatur, 2004, 240).

Education in elementary school should change this drastic decrease of creativity and promote the creative culture.

2. Innate needs to be creative

In theory of human motivation Maslow (1970) discusses human needs and presents a complex more holistic approach to motivation based on 17 propositions on motivation. Almost all people in our society (except the pathological exceptions) have a need or desire for a stable, firmly based, usually high evaluation of themselves, for self-respect or self-esteem, and for self-esteem of others (Maslow, 1970, p. 21). Basic needs are not only food, safety, belongingness and love; but also a need for self-actualization.

Maslow states that each of us is born with needs to experience higher values. So our higher needs and motivations are biologically rooted. "Every human being has the instinctive need for the highest values of beauty, truth, and justice, and so on. If we can accept this notion, then the key question isn't "what fosters creativity?" But it is why in God's name isn't everyone creative?" (Maslow, 1998, p. 11). So according to Maslow learning, creativity, fairness, responsibility, and justice come naturally to people.

More talented elementary school students have three typical features. 1. They develop ahead of time since they can learn within a certain area (or subject) with ease. 2. They learn in a qualitatively different way, demand less help from adults and want to learn by themselves. 3. They are truly motivated to learn, have strong interest and can focus (Winner, 1996). With these features they need a different learning environment, mentoring and teaching methods. Slovenia needs a better national strategy to work with talented students.

Since the more talented students are highly self-motivated they can experience higher stress when they cannot reach their goals.

World Health Organization's (WHO) definition of health is since 1948: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (Preamble, 1946)

Thus we can conclude that we need to be creative to be healthy and well. We also need to act socially responsibly and protect our health. For young students social responsibility means to have encouraging healthy school environment to develop into valuable innovative members of society.

Likar et al. (2014) present guidelines and a model to improve creative, innovative and entrepreneurial competences of youngsters in primary schools. Their model includes three main areas: 1. Innovation and Entrepreneurship Club; 2. Elective Subject "Innovative Problem-Solving"; and 3. Training for Teachers and Headmasters to become mentors in innovative processes. With innovative teaching methods, resources and approaches teachers should be able to educate creative, motivated and innovative students. In many European Union states they are encouraging the development of creativity, innovation and entrepreneurship. They are focused on promotion of creative and critical thinking, sense of value and responsibility both to oneself and to society (Likar et al., 2014, p. 2).

European Commission sees these activities important to move us out of the 2008 socio economic crises and passed several documents. The Entrepreneurship 2020 Action Plan (European Commission, 2013) has the goal to reignite the entrepreneurial spirit in Europe with entrepreneurial education. Regarding the education and training in Europe EC prepared another document on Education and Training (European Commission/EACEA/Eurydice, 2013). The upper secondary education is recognised as the minimum level for young people in today's society. The goal is to reduce the rate of early school leavers. Early (lower secondary) school leavers are more likely to have difficulties in their life due to lack of crucial qualifications needed for employment, participation in social and civic life and they are at greater risk of social exclusion and poverty (ibid, p. 17). For these reasons they present social and economic costs for society.

3. Possibilities and opportunities as source of creativity or stress

Our modern society, environment and life is increasingly complicated and complex. Complicatedness arises from characteristics (attributes) of (increasing) number of components, parts. Complexity relates to the (growing) attributes, which are caused by relations between components, parts. Due to relations, interrelatedness new attributes emerge due to the synergy. With the Dialectical Systems Theory and requisitely holistic thinking and acting we can manage this complexity in a more successful, innovative way (Mulej et al., 2000; Mulej and Kajzer, 1998).

Nowadays young people in more developed societies have many possibilities and opportunities, which increase the complicatedness and complexity of their life. Their quality of life can be significantly increased, but they also have to make many selections and decisions. In this challenging environment they can take initiative or experience more negative feelings like guilt and stress. The reaction of a young student depends on one's age, family and environment in which one is developing. In appropriate environment, with support, encouragement

and education Erikson (1998) identified different developmental stages. We believe that they are also important for development of initiative and creativity resulting in innovativeness. But our research among elementary school students revealed that their alma mater is also their major source of stress.

1. Hopes: Trust or mistrust develops in a baby or infant depending on how well her basic needs are taken care of by parents or care providers.
2. Will: Autonomy or self-doubting and feelings of shame. Child has certain obligations regarding feeding, dressing, washing. When he/she can master these duties he/she gains self-confidence; if not, he/she starts to self-doubt.
3. Purpose: initiative versus guilt. In this stage child needs to function within the family. Fulfilling his/her duties successfully he/she will develop self-sufficiency, if not: doubt and guilt.
4. Competence: industry versus inferiority (5-12 years). Child enters a wider social area and school. When he/she receives encouragement for his/her duties fulfilled, he/she will be even more encouraged for work and will gain self-confidence. When he/she experiences blame and punishment he/she will develop feeling of inferiority and incompetency.
5. Fidelity: Identity versus role confusion (13-19 years). Youngster is searching his/her place in the society, exploring him/her-self, gaining the value system of his/her life. He/She is looking for answers: Who am I? What will I do in life?
6. Love: intimacy versus isolation.
7. Care: generating versus stagnation.
8. Wisdom: ego-integrity versus despair.

When a baby, an infant and latter a child or youngster experiences many negative influences from the family and social environment, he/she has greater possibilities to develop negative emotions, feelings, perceptions and values. Such students have also a greater possibility to consider stress as a negative experience.

4. What is stress?

Our research problem is to define what stress is for elementary-school students, what is causing it and how elementary-school students react to it. We would like to detect what are the consequences of stress on an individual, how can we reduce it, or limit the impact of stress.

Stress is defined as a pattern of physiological, emotional, mental and cognitive responses of organism on impulses, which are disturbing the inner balance of a human (Kompore et al., 2010, p. 108). Stress is a state of mental or emotional strain or tension resulting from intimidating or demanding circumstances.

Stress is the non-specific response of the body to any demand made upon it. Stress is physiological, psychological and cognitive response of individual, who is trying to adapt to potentially harmful and endangering factors – called stressors (Jeriček, 2007, p. 9). Stress could be perceived as a complex structure of mutually interactive elements (Selič, 1999, p. 53).

Gross (2005) presented a transactional model of stress. He describes stress as arising from an interaction between people and their environment – in particular, when there's imbalance between the person's perception of the demands being made over them by the situation, and their ability to meet those demands. It is the person's perception of this mismatch between demand and ability that causes stress.

We find common points in these different definitions: Stress can come from any situation or thought that makes one feel frustrated, angry, nervous, or anxious. Stress is the body's reaction to a change that requires a physical, mental or emotional adjustment or response.

Stress can be studied in different groups. Looker and Gregson (1993) describe stress as:

- A. Normal stress: when we feel good and perceive our obligations, demands as something normal and usual. When we deal with everyday's situations we do not have the feelings of stress.
- B. Positive or friendly stress: when we are prepared. This phase has a positive impact on our physical and psychological capabilities and efficiency. We have the feeling of pleasant stimulation.
- C. Negative or harmful stress: when we feel we cannot manage the tasks ahead of us. There can be too many tasks or there are obstacles and we believe we cannot manage them.

Some other authors define only two types of stress: Positive - friendly stress or Eustress, and Negative – harmful stress or Distress. M. And H. McCubbin (1989) define four levels of stress intensity: stress, eustress, distress and hyper-stress. The first stress and eustress can have positive effects on an individual to activate internal resources and adapt to changes of circumstances. The latter two - distress and hyper-stress occur when tension produced by changed conditions cannot be overcome and the demand exceeds the internal and external resources.

Some authors describe also hyper-stress. From Komapare et al. (2010) and Carnegie (2012, p. 90) we prepared Table 1 Characteristics of stress.

Table 1: Characteristics of stress

EUSTRESS	DISTRESS	HYPER-STRESS
good stress	bad stress	very bad negative stress
positive response to stressors	negative response to stressors	permanent negative response to stressors
encourages us	harmful burning out; difficult to concentrate	very harmful negative impact on our productivity; physical tension, irritability,
positive influence on our capacity and endurance	causing anxiety	negative influence on interpersonal relations
recovers our strength	decay of values, spirit and will	pathological responses: ulcer, heart attacks, diabetes, ...
everyday's normal phenomena	feel threatened	burning out, anxiety, depression
our abilities to control stress are bigger than requirements	requirements are bigger than our abilities	nervous breakdown

Stress can be defined by consequences (good – bad - devastating) or by duration (short-term and long-term stress). Short-term stress causes on the physical level reaction: run or fight. Such response has adaptive role and helps humans to control the stressor. Selye (1976) prepared a model of general/adaptive syndrome: When we experience long term stress this can result in three phases:

1. Alarm. We become aware of stressor, excited and worried. Our first reaction is shock. After this phase we become prepared to run or act.
2. Reaction. Our capacity increases so we can cope with the stressor. If stressor is recognized as not endangering one we will return to normal state. Such stressor is recognized as a positive one. Overcoming such stressor raises our ability to cope with stress and increases our self-esteem.
3. Exhaustion. Energy reserves are depleted and we feel exhaustion. The sympathetic and parasympathetic are out of balance.

After six to eight weeks of continuous intensive stress we can feel: chronic fatigue, headaches, lower back pain, digestive disorders, upset stomach, tension, poor concentration, lack of self respect, emotional outburst, and increased consumption of coffee, alcohol or drugs, social isolation... Once we notice some of these symptoms we need to immediately take effective action. Otherwise serious psychological disorders (depression) or physiological illnesses will develop. ... (Kompore et al. 2010, p. 110). We can conclude that stress can cause many health problems and illnesses.

5. What is causing stress?

Stressor is a common name for any change that can result in stressful response. Psychiatrists Thomas Holmes and Richard Rahe (1967) studied responses to stressful events of 5,000 patients. They wanted to know, if stressful events might have caused illnesses. In their Social Readjustment Rating Scale 43 life events are rated. Later research confirmed the link between stress and illness. The most stressful events for adults are: Death of one's spouse (100); divorce (73); marital separation (65); imprisonment (63); death of a close family member (63); personal injury or illness (53)...

Response to stressors of every individual is different. Here we studied students; so we will present Stress Scale for non-adults.

Table 2: Stress scale for non-adults (Holmes and Rahe, 1967)

Life Event	Life Change Units
Death of parent	100
Unplanned pregnancy/abortion	100
Getting married	95
Divorce of parents	90
Acquiring a visible deformity	80
Fathering a child	70
Jail sentence of parent for over one year	70

Life Event	Life Change Units
Marital separation of parents	69
Death of a brother or sister	68
Change in acceptance by peers	67
Unplanned pregnancy of sister	64
Discovery of being an adopted child	63
Marriage of parent to stepparent	63
Death of a close friend	63
Having a visible congenital deformity	62
Serious illness requiring hospitalization	58
Failure of a grade in school	56
Not making an extracurricular activity	55
Hospitalization of a parent	55
Jail sentence of parent for over 30 days	53
Breaking up with boyfriend or girlfriend	53
Beginning to date	51
Suspension from school	50
Becoming involved with drugs or alcohol	50
Birth of a brother or sister	50
Increase in arguments between parents	47
Loss of job by parent	46
Outstanding personal achievement	46
Change in parent's financial status	45
Accepted at college of choice	43
Being a senior in high school	42
Hospitalization of a sibling	41
Increased absence of parent from home	38
Brother or sister leaving home	37
Addition of third adult to family	34
Becoming a full-fledged member of a church	31
Decrease in arguments between parents	27
Decrease in arguments with parents	26
Mother or father beginning work	26

To measure the impact of stress on individuals' health 43 stressors should be evaluated in the previous year. Score more than 300 presents risk of illness. Score 150-299 presents a moderate risk of illness and score below 150 presents a light risk of illness.

Another type of stress sources is based on family theory (McCubbin, 1993). Families are encountering changes and difficulties in their life cycle. Families are perceived as open systems. Some adapt to these changes successfully and develop strengths and capabilities. Some families deteriorate or disintegrate under similar circumstances. McCubbin (1989) called the first ones bon-adaptation, and the second ones mal-adaptations. Four main groups of stressors within the original family model are:

- Unexpected of unplanned events;
- Events as serious illness inside the family are more stressful than events outside family like flood, war, depression;
- Lack of previous experience with stressor events leads to increased perception of stress;
- Ambiguous stressor events are more stressful than non-ambiguous events (Friedman, 1998, p. 88).

Stressors are perceived very differently, depending on individual, one's previous experiences, circumstances, emotional, psychological or physiological stage etc. For example, seeing a bicycle can be stressful to someone who recently had a serious bicycle accident. For another person this is a normal event.

Some stressors have positive impact: alertness, more energy, focus, increased productivity, increased motivation, positive emotions.

Some stressors have predominantly negative impact on an individual. The impacts of stress on an individual can be studied in three groups:

- Physical: headache, chest pain, sweating, lower back pain, faster blood clotting, stomach ache, breathing difficulties, fast heart beat, dizziness, sickness, muscle cramps, high blood pressure, indigestion, sleep disorder, mandibular joint pain, weakened immune system, ...
- Psychological and emotional: loss of self-respect, continuous fear, loss of self-esteem, feelings of being a victim, memory loss, depression, chronic anxiety, apathy, hostility, loss of interest for social activities,...
- Cognitive: sudden outbursts of anger, frequent sadness, loss or uncontrolled appetite, concentration difficulties, loss of interest, low level of energy, depression, overcritical, laughter at inappropriate circumstances, large consumption of coffee, alcohol, drugs, irrational behaviour, ...

6. Interpretation of empirical results

Empirical part of the research was done by Sarah Marn. To test the main research question: how students perceive stress, the questionnaire was developed with 13 questions. Most questions were structured. A sample included all students in 8th and 9th grade in the year 2013 in one elementary school. Answers of 141 respondents, 66 female and 75 male, were analyzed.

Most of students do not know what stress is. Their responses were not similar to the definitions found in the literature used in this study. Their most common responses were: unpleasant feeling, large pressure, type of fear, time pressure...

Majority of students responded that they perceive stress as negative. Based on literature survey presented in first part of our paper and in more detailed in the Marn (2014) there are two groups of stress: positive and negative one; but in modern society stress is often perceived as distress or hyperstress. Only 3% of respondents perceive stress as positive. When we compare this results with Kompare et al. (2010) and Carnegie (2012) we can conclude, that very few of our tested students have experienced positive or eustress. Comparing our results to groups of stress as defined by Looker and Gregson (1993), none of the students responded: normal stress.

96% of respondents stated that they have already experienced stress. On our question where they experience stress 79% respondents wrote that at school and activities related to school. For 9% stress is caused in relations with parents. 7% of respondents experience stress in relations with school mates and friends.

Our next question was about the most stressful events. Written exams were stated 91 times (64.5%), oral exams 83 times (58.8%) and disputes among parents 12 times (8.5%).

On a similar question about the most important stressors for their (in questionnaire: your) class mates we received similar responses. 79% of respondents wrote that school and school related issues are causing them stress.

The highest stressors on Holmes and Rahe scale applicable to our cultural environment and the age of the studied group are death of a parent (100), of divorce of parents (90), acquiring a visible deformity (80). Comparing results of our survey we find great differences. On Holmes and Rahe scale school related stressors are not among the top ten.

Interesting are responses to the question how do you react to stress. Students' responses included: 10% ignore it; 22% bite nails; 38% try to relax; 13% try to talk with a friend or parent; 15 % search for reasons (causes) and try to solve them.

7. Social responsibility

Becoming socially responsible requires great change in our human mentality, understanding, reasoning and decision making. WHO defines health as a state of complete physical, mental, and social well-being. Stress can cause many negative effects on our physical and psychological health. Hrast and Mulej remind us, that health tackles all 7 core subjects of ISO 26000 (organizational governance, human rights, labour practices, the environment, fair operating practices, consumer issues, and community involvement and development) and matches them with the 7 principles of SR (Accountability, Transparency, Ethical behaviour, Respect for stakeholder interests, Respect for the rule of law, Respect for international norms of behaviour, & Respect for human rights) (ISO 26000, 2010). As they are interlinked with interdependencies and holistic approach so is elementary school interlinked and interdependent with the culture, national educational policy, teachers, public

health system, students with their families and many more. Social responsibility should be used to promote such values, norms, culture and ethics to support the development of individuals as creative members of our society learning in less stressful elementary schools. It appears that now students and their parents have to take a large responsibility to develop into healthy creative adults.

10. Conclusions and implications for research

Elementary school should be a socially responsible organization that promotes well-rounded education. Young students today have many possibilities and opportunities. This should contribute to better health and education but our survey revealed that students experience school as a major stressor. What are the reasons for this should be studied in the future. An individual should be responsible and try to develop one's mental and physical health. This is in compliance with the first principle of ISO 26000: Accountability. They should learn more about stress and the possibilities to avoid stress, limit the impact of stress and also learn the various techniques and methods for managing stress. Such behaviour is in compliance with the principles Transparency, Ethical behaviour and Respect for stakeholders' interest. When we learn more innovative ways to avoid stress or manage the consequences, we are better person and create better environment for all. The principle Respect for the rule of law is used when in society school rules and norms are prepared and respected. In such more just society every individual can feel happier, more creative and healthier and respect for different ones and for human rights.

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