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**BASIC NEEDS AND DIVERGENT THINKING IN THE MODERN  
INFORMATION FIELD**

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**Abstract**

The authors of the article present the research on the psychological impact produced by the up to date information realm on young people's stress relieving strategies, as well as specific manifestations of divergent thinking in a post-industrial society. Basing on the analysis of the modern information field content, we defined a number of issues that need exploring in terms of the students' choice of stress relieving strategies. In order to identify stress-relieving strategies used by young people, we conducted a survey, which involved a total of 224 students, with a sampling of 1-4 year students with engineering and humanitarian specializations from MADI and Moscow Social Pedagogical Institute from October 2017 until March 2018. The article adduces some examples of students' usage of misguided avoidance strategies in stressful situations and meeting basic physical needs. In this type of behavior, the usual pattern is bouts of the culture of visual images alternating with the culture of language in the modern information space. As a result, the abundance of destructive images can strongly interfere with sensitivity and dilute sensual experience. The final concept proposed by the authors is a harmonious development of person's cognitive and creative abilities, the integration of which promotes changes in the survival strategies to find new non-standard ways to achieve a goal, through analytical work and intuitive solution based on the vision and feeling the nuances of a situation.

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## 1. Introduction

The issue of personal needs in modern environment, when there is a collision between the value systems of the present and the past, meets the issue of thinking strategies in the information field of paradoxical social ideas, often filled with symbols and signs, which are difficult to understand. What was easy to understand and clear to define and express at some time, at other time or other information space can be viewed as indefinite knowledge, which does not correspond to the predominant attitudes and ideas.

According to social theories, a modern human being made a journey from being focused on reflecting realistic things and phenomena to the modernist symbolic ideas about the world order, and then to the post-modern nature of perception and thinking. This shift in mindset, from the generally accepted and easy-to-perceive/analyse (realism) to the vague and imperceptible-to-rationalise (modernism), and then to utilitarian, non-sensitive type of thinking (post-modernism) triggered a range of psychological problems.

Still, what is the transformation of the basic personal needs and thinking strategies based on? According to research on social and psychoanalytic philosophy, hermeneutics and social psychology, the culture of visual images is intensely pushing out the culture of language in the modern information space (Zizek, 2008). The issue is not in what the basis of the content and context of textual information is, but: "What does seeing mean?" (Merleau-Ponty, 1999), "What is visual culture?" (Tzanev, 2009, 2017), "What is image?" (Deleuze, 2004), "What is the ontological dimension of imagery structure?" (Nikitin, 2014, 2017).

An image intrudes itself, existing beyond the control of the rational. In fact, it shapes the consciousness of a modern human and determines the development of one's thinking, imagination and sense. An image created in virtual space makes the subject of perception detached from the real world of items and feelings. Its playfulness charms, its otherworldliness attracts, the image frightens with its incompleteness and gives hope to accomplish the virtual goals successfully. The urge for an expeditious effective result is increasingly replacing the cognitive need for searching the meanings that are hidden in reality and texts, as well as for determining one's attitude to them.

An image shapes consciousness, which, according to Metzinger, is reality, while all forms of thinking are distributed among the processes carried out by people (Metzinger, 2015). Otherwise stated, an image determines the structure and content of personality. It has a perceptive and psychological impact, aimed at identifying image-personality relations (Joselit, 2012).

## 2. Problem Statement

The modern society has a complex dynamics driven by numerous social, economical and political factors. An intense information flow is an important feature of today's dynamics. The modern world's person has to manipulate huge information flows, to face new unknown tasks, which suppose no ready-made behaviour algorithms, or to make decisions in the context of uncertainty. At the same time, people are likely to search for stability, and the situations of uncertainty are very stressful for them (Bibbey et al., 2013).

The concept of 'uncertainty' is quite vast. Uncertainty is understood as ambiguity. It also means indeterminateness. Finally, it is viewed as lack of certainty. Ambiguous situations seem to be

unstructured, or having no guides for human behaviour. Also, uncertainty serves as lack of sufficient (subjectively) information. At the same time, Zinchenko (Zinchenko, 2004) refers to uncertainty as not always being a result of our ignorance: uncertainty is an intrinsic quality of the world, whereas determinism is rather due to subjective perception. The objectivity of uncertainty as a quality of the physical world is related to quantum-mechanical regularities, the fluctuations of a physical vacuum. Alongside outer uncertainty, caused by a situation, one can consider inner uncertainty, which results from the conflict of values and withstands inner certainty, firmness, understood as strengthening of the inner personal pole, strengthening of personality (Krivtsova, 2015).

According to Belinskaya (Belinskaya, 2014), uncertainty should be viewed as a subjective experience of a current situation as that uncontrolled by the subject and therefore uncertain. Based on research, response to psychological uncertainty may vary from complete rejection, the intention to establish any kind of certainty, or weak-willed submission to the urge for creative transformation of uncertainty, its acceptance as a room for opportunities. However, long-lasting situations with a high level of uncertainty are rather stressful. Typical experiences of uncertainty partly result from a personal inability to overcome the chaos of social and cultural uncertainty, as well as from individual resource abilities.

Apparently, the ideal world cognition strategy in the modern world is addressing convergent thinking with a preset structure of analysis and action algorithm. The strategy of the most expeditious accomplishment of a goal with the lowest energy and mental efforts comes into the fore in place of the creative approach to various types of information or life situation.

However, resolving an issue in one way is sometimes inefficient; on the contrary, it is possible to find a variety of ways to accomplish the goal. The ability to manipulate various strategies largely depends on the development of divergent thinking, which enables an individual to overcome the stereotypes of thinking and action (Nemov, 2016).

At the same time, according to Ponomaryov (1988), creative thinking does not come down merely to the intellectual activity, aimed to resolve the task set. Alongside the intense search of various options and the choice of the "rational" divergent strategy, creative thinking is characterised by sensitivity to the perception of activity byproducts, which bear no pragmatic meaning for a subject. It is due to the discrepancy between the plan and the expected outcome that the mind produces a brand new formation. That is why developing divergent thinking based on rational logic is the necessary but insufficient condition to develop human creative mind, which is not related merely to the ability to rapidly define the meanings related to numerous objects of perception, to innovative and flexible thinking.

As postmodernism cultural artefacts are designed for mass audience perception, the prevalence of moral attitudes focused on their consumption provides for the development of superficial, quasi-hedonist thinking. Creativity is viewed as somewhat inconvenient, a complex phenomena, which competes with the strategy aimed at meeting the fundamental biological needs. Hedonist intentions provide for escaping anything that entails efforts and risks in one's activity related to the search of new solutions.

It should be noted that there is a trend to both simplify modern visual images and deconstruct them, also by giving them elements of aggression mixed with decomposed corporeality. An integral congruent form of a meaningful image reflecting real items, whether a person, animal or plant, is replaced

by an artificial combination of parts that cannot be combined. This deconstruction is interpreted in terms of the personal ability for creative divergent thinking. This type of 'creative process' is promoted, fostered and fills visual displays. Actually, the subject-matter of "art creates an endless sequence of meanings by formatting the configurations of image flows: it creates a dynamic situation" (Joselit, 2014).

Therefore, the ability for divergent thinking is regarded as the ability to combine the unjoinable, to activate the non-existing, to imitate the unnatural, to achieve a goal rather than recency. The destruction of the natural image integrity leads to the dilution of human sensitivity. The play of deconstructs replaces the wish to grasp the implications of a piece of art. The content grows vacuous, integral to the disharmonic relations of visual elements, which have no objective purport.

### **3. Research Questions**

Today's people face the situations, which they subjectively feel as difficult, which disturb the ordinary course of life. Going through such situations often impacts the way to perceive both the world, and one's place in it. Students are particularly sensitive to stress inducing factors. Their stresses mostly include anxiety and worrying before exams, high academic load, relations in a group of students, as well as sexual relationship (Saklofske et al, 2012). Stress inducing factors for senior students also include the choice of future job options, seeking ways to earn for a living, and the prospects for their future financial autonomy (Buser et al, 2017).

Based on the analysis of the modern information field content that has been presented above, we defined a number of questions, which need to be explored in terms of the students' choice of stress relief strategies. They include defining the key aspects of coping strategies, defining the range of needs bearing adaptation value, identifying gender peculiarities and differences in the answers by students from the humanitarian and engineering areas.

### **4. Purpose of the Study**

In order to identify stress relief strategies used by young people, we conducted a survey, which involved a total of 224 students, with a sampling of 1-4 year students with engineering and humanitarian specialisations from MADI and the Moscow Social Pedagogical Institute from October 2017 until March 2018.

### **5. Research Methods**

We used a free description of the ways to relieve stressful situations and their consequences as a data collection method. Each respondent was proposed to write an essay, "My Ways to Relieve Stress." We opted for this data collection method as our objective was to receive 'open', direct answers from respondents, as compared to those intermediated by testing questions. The findings were processed in the course of the frequency-semantic analysis. We also singled out semantic units and calculated the frequency of the obtained categories. The Pearson's chi-squared test was used to carry out the statistical analysis of the data.

## 6. Findings

Students' coping strategies represent four main areas, which we will refer to as spheres:

the body sphere (72% of answers);

the emotional sphere (28%);

the activity sphere (12%);

the cognitive sphere (8%).

The total amount of answers received in the survey exceeds 100%, as some students listed several coping strategies.

The body sphere is presented in the students' answers to the greatest extent. It accounts for over 70% of the obtained semantic units and therefore is considered to be the main stress relief strategy. It is a strategy aimed at satisfying basic needs as a stress relief technique. Students listed the following ways to get physical pleasure as a method to relieve stress and its consequences: food (delicious, sweet, quality tea, etc), sleeping, sports (young men) and spa (young women). Senior students listed smoking and drinking alcohol as ways to relieve emotional tension. Thus, the sphere of fundamental needs bears the maximum load in order to relieve difficult situations, which cause the state of psychological tension or increased nervous strain. We did not reveal any differences regarding the distribution of answers related to the role of stress relief techniques based on basic needs, whether the answers were given by students of the humanitarian or engineering domains.

The emotional sphere is second largest sphere that helps students cope with stress and tension. It includes stress relief techniques, such as getting pleasure from listening to music, reading books or watching films, as well as getting support while communicating with family and friends. It should be noted that parents are regarded as close ones by only some 30% of respondents, the other list other family members who enjoy their confidence. Also, from 15% to 20% of students in each group list inefficient strategies (withdraw into myself, cover myself etc.). There is no distinction in male and female answers' distribution within this sphere, but there are statistically important differences in the distribution of answers given by the humanities and engineering students ( $\chi^2=29.7$  with  $p\leq 0.001$ ) relating to support from family and friends: humanities students have a stronger focus on interaction with family and friends, i.e. 75% vs. 33%, which account for engineering students.

The activity sphere is the third sphere in students' answers. Increasing professional load is more typical with young men, whereas young women tend to focus on household tasks. These differences are statistically important ( $\chi^2=5.7$  with  $p\leq 0.05$ ).

The cognitive sphere is the fourth and it is the least presented in students' answers. It includes various strategies, such as abstraction and positive thinking (tell oneself that everything will be all right; think about good, imagine oneself in a benign situation). Regarding this strategy, there have been revealed no statistically meaningful distinctions related to both the answers of young men and women, and to the answers of humanities and engineering students. The following common regularity of using the cognitive strategy by sampling respondents stands out particularly: the response to stress is in line with the 'post factum' principle. The bulk of students lack the anticipatory cognitive strategies (only 4% students (3 of 78) noted the availability of developed anticipatory coping strategies).

Thus, based on the results of the survey we can conclude that the prevailing strategies in the sample group are the strategies related to satisfying basic needs; 15%-20% of respondents typically use inefficient escape strategies, narrowing their communication circle under stress or unwilling to ask for help or accept assistance from the others.

It should be noted that coping strategies, established in a homogenous social culture, are replaced with multicultural strategies, unified by common motives and objectives, being represented as the need for expeditious achieving of social success. Based on modern research, there are over 400 strategies aimed at coping with difficulties (Skinner et al., 2003). The analysis of the presented empirical data shows that the prevailing stress relief strategies used by young people of post-industrial society are determined by the leading thinking strategies that have an effect on the manner of perception, understanding and attitude towards the reality.

## **7. Conclusion**

The analysis of the works on the students' choice of stress relief strategies provides for the conclusion that there is a need for broadening the ideas related to the nature of creativity, the development of such components as divergent thinking, independent goal-setting, the ability for autonomous behaviour that is controlled internally, developing self-reflection, awareness of one's actions, responsibility for them and anticipation of the consequences of one's actions, efficient and appropriate person-to-person interaction, intuitive and spiritual orientation in acquiring social experience.

The analysis of basic needs and coping strategies used by the young postindustrial generation, as well as specific manifestations of divergent thinking in the modern information field, provides for the following postulates, which require further empirical research:

Modern information field is filled with indefinite cultural symbols and signs that contribute to the development of young person's prevailing attitudes and urges for the earliest satisfaction of hedonist needs.

There is an intense growth in convergent thinking styles, aimed at improving social issues resolving strategies, in order to meet basic needs.

Divergent thinking development looks important, but it is developed in the context of the prevalence of convergent attitudes, which results in improving cognitive abilities, but decreases sensitivity level.

Modern information field is filled with destructive imagery, which increases the sensitivity threshold, thus ensuring the predominance of convergent thinking style in satisfying basic needs.

Young people's stress coping strategies are aimed at meeting basic biological needs, leaving higher cognitive needs disregarded.

Based on this background, to develop creative and divergent thinking, governing young people's coping strategies, it is necessary to develop an information field, which brings in harmony and expresses cognitive and sensual spheres of mind. These may include games and technologies, the principles of which serve to unite the rational and the intuitive, sensual and sensitive. Approaches used in practical psychology, such as art therapy, drama therapy, pretend plays, and, certainly, playing chess as an intellectual game in intuitive solutions space, entail the conditions, which require to find new non-

standard ways to achieve a goal, thorough analytical work and intuitive solution based on the vision and feeling the nuances of a situation (Nikitin, 2014, 2017; Tzanev, 2009; Stoyanova, 2017).

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