

## Relationship of Non-Structural Forms of Social Interaction with Problems of Social and Psychological Adaptation of Students Prone to Chemical Addictions

Elvira N. Gilemkanova<sup>a</sup>

<sup>a</sup>Kazan Federal University, Kazan, Russia

### ABSTRACT

The changes in contemporary social and cultural environment determine the necessity to increase the efficiency of adaptive mechanisms, especially for those categories of people who are subject to social risks. One of those categories is students prone to chemical addictions.

To study the relationship of forms of social interaction with problems of social and psychological adaptation of students prone to chemical addictions, whereas the readers are offered to consider the author's point of view on the analysis of the phenomenon of social and psychological adaptation. The leading method to the study of the problem is the method of cross-sectional and comparative analysis. The article presents the results of an empirical survey of 300 students (17% of them are prone to chemical addictions), reveals the key features of their social and psychological adaptation and coping strategies as well as establishes and analyzes the relationship of non-structural forms of social interaction and the problems of social and psychological adaptation of students prone to chemical addictions. The article is of practical value to teachers and psychologists at the stage of development of preventive programs for the educational cycle in higher education institutions. The article also helps to improve efficiency of social and psychological adaptation of students in the period of their study at university. The article may also be useful for the development of additional professional training programs for those employed in the university's psychological aid services, and for experts on educational work.

### KEYWORDS

Social and psychological adaptation, area of social and psychological adaptation, behavioral strategy, addiction

### ARTICLE HISTORY

Received 20 July 2016  
Revised 28 August 2016  
Accepted 9 October 2016

### Introduction

The study of the phenomenon and the essence of human adaptation is one of the most urgent problems in medical-biological, psychological and social sciences in recent decades. On the modern stage of development of information, the society and the technology have reached the point where some scientists talk

**CORRESPONDENCE** Elvira N. Gilemkanova ✉ [enkazan@mail.ru](mailto:enkazan@mail.ru)

© 2016 Gilemkanova. Open Access terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>) apply. The license permits unrestricted use, distribution, and reproduction in any medium, on the condition that users give exact credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if they made any changes.



about the changing of social conditions of existence (Artamonov, 2016). The authors of Psychological Encyclopedia H. Sandberg, A. Uainberger & J. Taplin (2005) predict a further increase in the complexity of existence as a consequence of increasing access to information and information overload, the “shift of beliefs” and the decline of traditions. The transformation of consciousness is accompanied by a depreciation of the many well-established identity categories. This situation requires from a man a certain flexibility in the use of mechanisms of adaptation to society.

The investigation of adaptation features of students prone to addictions has recently been one of the most sought after fields (Gilemkhanova, 2012; Gilemkhanova, 2013). This is due, primarily, to the steady growth of psychoactive substances’ consumers and the age decrease for initiating addictions. The knowledge of social and psychological adaptation of students prone to addictive behavior will allow to create effective programs to reduce the propensity to addiction and will intentionally affect the targets of addiction, taking into account the compensatory mechanisms of social and psychological adaptation of a person prone to addiction.

We have organized this study of social and psychological adaptation and its relationship with various forms of social interaction taking into account the prevalence of the addictive behavior in our society (Concept of socialization of addicted individuals in professional education, 2012), the importance of its full study to solve problems of applied psychology, the development of preventive measures, as well as its relevance for problem-solving of personal and professional growth of students.

### Literature Review

Currently, adaptation is an interdisciplinary, polysemantic term used in many fields of knowledge, both in natural sciences and humanities. It is as well used as an instrument of learning certain aspects of the interaction between social and natural systems with their environment.

Theoretical analysis of definitions of the term adaptation allowed to allocate several aspects which, on one the hand, characterize a timeless interest to problem of adaptation among scientists, and, on the other hand, the non-existence of a clear definition of adaptation, that would combine the complexity and the contradictory nature of this phenomenon. Depending on the psychological direction taken by the author, the adaptation has been associated at various times with the unconscious (the psychoanalytic school: Freud, 2004), with learning (behaviorist school: Godefroy, 1992; Bandura, 2000) with mental abilities (cognitive school: Piaget, 1994; Festinger, 2000), with emotional intelligence (cognitive-emotive school: Boldachev, 2005), with personal characteristics (systemic approach: Mendelevich, 2004) and with self-governing system (system-synergetic approach: Fomin, 2003). Herewith the adaptation is understood as adjustment (Fromm, 2009; Platonov, 1972), a result of actions (Berebin & Tishevskoy, 2013), the process of establishing conformity (Berebin, 1988), a systemic phenomenon (Fomin, 2003), a set of reactions (Medvedev, 1987), a state (Volik, 2008; Bandura, 2000), a personal function (Volik, 2008), a part or a stage of socialization (Parigin, 1971), an interaction of the individual and the society (Andreeva, 2002).

We draw attention to the fact that now researches concentrate more attention on the role of social aspect of psychological adaptation. Socio-psychological adaptation cannot be considered without taking into account the features of socio-cultural space. In order to describe the relationship and the interaction (of the subject of adaptation and socio-cultural space) in psychological and educational researches we applied scientific methodology of the system approach and, in particular, the theory of synergy (Parsons, 1998). Unlike traditional scientific disciplines, considering mainly rigidly deterministic phenomena which are realized in closed systems, synergy focuses on open-type systems. Within this paradigm, a man is regarded as a complex, open and self-developing system. This system carries out constant, active interaction with the environment. L.S. Vygotsky (2005) believed that a man "comes into contact with nature, not otherwise than through the environment, and thus the environment becomes an important factor determining and establishing the human behavior". He understood the environment as a cultural and historical reality, integrating the experience of the development of mankind and consisting of items having certain value for a man. Modern philosophy considers the environment as a decisive, though not the only factor of an individual development. The focus is put on the allocation of more complex, diverse, contradictory, interdependent, spatially-volume relation of an individual with the environment. The modern philosophy of education considers environment as a substance which, in contrast to the empty space (vacuum), has certain properties that affect the transfer of interaction between the objects (Polonsky, 2004). In the modern dictionary of pedagogy this concept is presented in the most general sense, as a set of conditions that surround a man and interact with him as a body and person.

Thus, the use of system-synergetic approach allows us to consider adapting personality and as a system, and as part of the metasystem – the environment. The study of social and psychological adaptation of a person as a metasystem makes us include socio-cultural environment as part of analysis. A.S. Tarasov (2011) determines the socio-cultural environment as complex structure of social, material and spiritual conditions in which human activity is carried out. According to another view, socio-cultural environment is part of the socio-economic and cultural-educational space in the region, by means of which socialization of a person can be carried out (the process of development of an individual as he interacts in the course of life with the socio-cultural environment, being enriched by this as a self-realized person) Inculturation of a person can also be carried out by the same means (the process of acquiring by an individual of certain ways of thinking and actions that make up a culture and distinguish his society from other human groups) (Makarenko, 1997, Bayanova & Mustafin, 2016).

We agree with the position of the researcher M.V. Grigorieva (2010), that the recognition of the crucial role of the individual activity has important methodological consequence. It allows to break out from the "narrow" views of understanding the problems of adaptive interaction of individual with the environment as a passive submission to the requirements of the environment. And it leads to view adaptation broadly as the process of active overcoming by an individual of his internal constraints and external obstacles. So the key to the problem of interactions, is the idea of their mutual influence.



The concept of interaction is central to the system-synergetic approach and is given great methodological significance. The theory of psychological systems by V.E. Klochko (2007) allows you to remove the previously unbridgeable dichotomy of terms "objective" and "subjective", "people" and "environment" by identifying the existence of a third reality. The last one is generated by the interaction of the first two, and in it the "neutral objective reality by the presence of subjective " is disrupted. The theory also enables to look at the driving forces of development from a different angle, because the growing complexity of the interaction with the environment leads to emergence of more complex dimensions, etc.

When we talk about the interaction between an individual and the environment during adaption we must define that it lies in mutual influence of characteristics of the individual on the one hand, and the external conditions, certain parameters surrounding social and cultural space on the other hand. The concept of socio-cultural space is wider as compared to the social and cultural environment. The main difference between space and environment is the presence of the subject of interaction in the latter. The term "environment", in contrast to the "space", "carries the connotation of influence" (Oxford Dictionary of Psychology, 2002). In describing the features of the social and psychological adaptation from the position of system-synergetic approach we suggested the term "area" of social and psychological adaptation for defining "arena, place" for interaction. Area of social and psychological adaptation is a set of internal dispositions of the individual and external conditions, this is the driving aspect and the direction of a person's adaptation. The set of areas of social and psychological adaptation makes up the socio-cultural adaptation environment.

**Table 1.** Characteristics of socio-psychological adaptation

| <i>Aspect (area) of adaptation</i> | <i>Constructive direction</i>   | <i>Destructive direction</i>   |
|------------------------------------|---|--|
| Social normativity                 | The adoption of social norms, following them and waiting for similar behavior from others.  | Non-Standard (deviant) behavior, refusal to follow social norms.   |
| Social orientation                 | The external direction of the vector activity of the person   | The internal direction of the vector activity of the person  |
| Attitude to adaptation             | Positive attitude towards adaptation.   | Negative attitude to adaptation (the presence of the internal resistance to environment, safety, mimircic adaptation).                               |
| Targeting                          | Planning and targeting of adaptation which ensures its constructiveness.  | Spontaneous, unfocused unconstructive adjustment, without orientation for the future.  |
| Transformation                     | Increased interaction with the environment; It characterizes the active position of expansion and transformation while adaptation, the degree of strength and depth of the relationship with the environment. | Limit to the total number of connections with the environment or intensity reduction, transition to a more simple relationship with the environment. |
| Self-development                   | Adaptive changes, with which  | Adaptive changes which involve   |

|                           |  |  |
|---------------------------|--|--|
|                           | the internal structure of the subject of adaptation becomes more complex and improves  | simplification of the internal structure of the subject of adaptation.   |
| Analysis of the situation | Focusing on the present situation in the adaptation.   | Focusing on past experience, excluding current situation demands   |
| Interaction               | Integration with the interests of others in the adaptation; It characterizes the orientation of the individual on the achievement of common group goals.   | Contact on the formal and external level, without a focus on the achievement of common group goals.  |
| Self-preservation         | Adaptive changes of the subject of adaptation, which do not violate his structure of value orientations and consciousness; it characterizes the maturity of value-semantic "skeleton" (rod) of the person, including self-determination and self-attitude. | Adaptive changes of the subject of adaptation, which are accompanied by fundamental changes in the internal structure, destroying his/ her structural integrity. |
| Identification            | Subjective and objective identification with a certain group; characterizes maturity of group and professional identity.   | The lack of subjective or objective identification with a group, social ties and the relationships lose it's value and common world view.                        |

According to the chosen research methodology the system and subject approaches we define socio-psychological adaptation as the coordination of the components of "personality and socio-cultural environment" system in a result of their interaction. Socio-psychological adaptation is characterized by two directions (constructive and destructive) and it is also marked by the aspect of the interaction of an individual within the frames of "personality and socio-cultural environment" system.

### Materials and Methods

The purpose of this empirical study was to determine the peculiarities of the social and psychological adaptation of students prone to alcohol and drug addiction.

The objectives of the study were: a) to determine the peculiarities of the socio-psychological adaptation and coping strategies of students prone to alcohol and drug addiction; b) to carry out a comparative analysis of the peculiarities of adaptation and coping strategies of students prone to alcohol and drug dependencies.

It was hypothesized that students prone to alcohol and drug addictions have specific particularities of adaptation and behavioral strategies which extend maladaptive influence and reduce their personal and social efficiency.

The following techniques were applied in the study: 1) Tendency To Addictive Behavior (Grjaznov, Cheverikina & Tukhvatullina, 2009), which was developed in the Psychology of Personality laboratory of IPP PO RAO. 2) Multi-



level personality questionnaire "Adaptability 99" (Maklakova & Chermyanina, 2001). 3) Coping test by R. Lazarus (Kryukov & Kuftyak, 2007). The survey results were processed with the help of general statistics (STATISTICA 6.0 package). The object of study - 300 students of the city of Kazan. The average age of the respondents was 22.5 years.

### Data, Analysis, and Results

According to the results obtained by the technique Tendency To Addictive Behavior, the inclination to alcohol dependence is found in 16% of the students, the inclination to drug addiction is found in 18% of students.

According to the Adaptability 99 questionnaire data, students prone to alcohol addiction and drug addiction can be characterized as having signs of different accentuations, which are partly compensated in usual conditions and may show at change of activity. Therefore, the success of their adaptation depends on the external conditions of the environment. As a rule students belonging to this group possess low emotional stability. They may display anti-social frustration, manifest aggression and cause conflicts. People in this group require an individual approach, a constant monitoring, corrective measures. Compared with students, having no inclination to alcohol addiction, it is more difficult for them to adapt to the new conditions of work. It takes them longer to get used to new team, and it takes them more effort to properly navigate the situation. Again more time is needed for them to develop strategy of behavior. They are more scandalous. In general, they possess a lower personal adaptive potential comparing to students not prone to alcohol addiction ( $t = 5,67$  at  $p < 0,01$ ) and students, not prone to drug addiction ( $t = 5,67$  at  $p < 0,01$ ). Students prone to alcohol and drug dependencies also enjoy poor neuro-psychological stability. According to the questionnaire data, they have low levels of behavioral regulation and a certain tendency to nervous and mental breakdowns, they lack adequate self-esteem and realistic perception of reality. Unlike students, not inclined to addictive behavior students prone to alcohol addiction and those prone to drug addiction show low level of neuro-psychological regulation, ( $t = 5.17$  at  $p < 0,01$ ) for alcohol addicts and ( $t = 6.37$  at  $p < 0,01$ ) for drug addicts which is significantly lower comparing to the students with no propensity to addiction who have it at a satisfactory level. As for communication skills, students prone to alcohol and drug dependencies keep them at a satisfactory level in contrast to the students with no alcohol addiction ( $t = 5.17$  at  $p < 0,01$ ) and no drug addiction ( $t = 5,4$  at  $p < 0,01$ ), who have such skills well developed. So, addicted students may experience more difficulties than others in building contacts with surrounding people, and they can vent out aggressiveness. Regarding moral norms, they appear to be at a satisfactory level just as in students not inclined to alcohol dependency. However, this level is veraciously lower than for students not prone to alcohol addiction ( $t = 4,51$  at  $p < 0,01$ ) and not prone to drug addiction ( $t = 4,51$  at  $p < 0,01$ ). The fact that it is more challenging for them to adequately assess their place and role in a team proves it. They are less eager to observe generally accepted norms of behavior than their classmates. Students prone to alcohol and drug addiction, are also significantly different from the students who are not inclined to dependences because they have a significantly higher suicide risk ( $t = 6,42$ ;  $t = 8,61$  at  $p < 0,01$ , correspondingly).



Doing the structural analysis it's worth mentioning that all of the components of adaptability in the described groups are closely linked. Meanwhile the only difference is that moral normativity is not associated with communication features for students prone to alcohol and drug addiction whereas for students not inclined to dependencies it has a weak reliable direct correlation ( $r = 0,3$  at  $p < 0,01$ ).

During analyzing of the applied behavioral strategies it was found out that students prone to alcohol addiction, mainly expressed confrontational coping ( $t = 3,63$  at  $p < 0,01$ ) and distancing ( $t = 2,9$  at  $p < 0,01$ ) in their behavior. It is also more common for them to use escape and avoidance strategy ( $t = 3,48$  at  $p < 0,01$ ). So aggressive efforts to change the situation which presume a certain degree of hostility and willingness to take risks or efforts aimed at fleeing from the situation and decreasing its' importance are characteristic of students inclined to alcohol dependence. Also, they apply efforts to escape or to avoid the problem more often than their peers. As for students prone to drug addiction, just as the ones prone to alcohol addiction, they mainly stick to confrontational coping ( $t = 2,48$  at  $p < 0,01$ ) and escape-avoidance ( $t = 2,43$  at  $p < 0,01$ ) unlike students not inclined to addictions. Students prone to drug addiction are different from those having no inclination to the dependencies in a way that they feel alien to social support ( $t = 2,16$  at  $p < 0,01$ ). They are less likely to plan problem solution ( $t = 2,9$  at  $p < 0,01$ ) and are more likely to positively overestimate the situation ( $t = 2,98$  at  $p < 0,01$ ). There is a certain peculiarity in the relationship between adaptation and coping strategies among students. The decrease of personal adaptive potential, neuro-psychological stability, communication skills and moral norms finds its' expression in the behavior of non-inclined to alcohol addiction students through escape-avoidance strategy. In contrast students prone to such addiction express such decrease more aggressively, through confrontational coping. For students prone to drug addiction the risk of suicide is connected with positive overestimation (they consider themselves to be great and unappreciated, or they may think the world is too incapacious for them and they want to leave holding head high because they are misunderstood). At the same time positive overestimation for students not inclined to drug addiction reduces the risk of suicidal behavior.

The comparative analysis of the characteristics of adaptation and coping strategies used by students prone to alcohol and drug addictions leads to the conclusion that these groups are identical in adaptability. They are less effective due to poor personal adaptive potential and less developed communication skills. As a result, both groups prefer confrontational coping and avoidance for behavioral strategies. For those prone to alcohol dependence a distancing strategy is also a way out. However, the analysis on the significance of differences indicates the absence of fundamental differences in frequency of selection of a certain strategy in groups prone to alcohol and drug dependencies.

## Discussion and Conclusion

Works dedicated to the study of social and psychological adaptation (Kuzmina, 2006; Tsukanov, 2006; Chuchelina, 2007; Doroshenko, 2008) are of great importance for analyzing the obtained results. However, these works are devoted to problems of adaptation of students in general, without differentiating the category of students, which is the object of our study.



Analysis of the scientific research showed that there is now a contradiction between the practical demand for the research aimed at studying the problems of adaptation of students prone to alcohol and drug addiction and insufficient knowledge of the topic. The obtained results indicate the presence of specific features in the socio-psychological adaptation and preferred forms of social interaction among students, prone to chemical dependencies. It defines perspective fields of further study of the role of effectiveness of behavioral, regulatory, value-motivational adaptation mechanisms among students prone to chemical dependencies.

Students prone to alcohol and drug addiction have adaptation peculiarities and possess behavioral adaptation strategies, which have maladaptive influence and reduce their personal and social efficiency. Confrontational coping, distancing, escape or avoiding problem are characteristic of students prone to alcohol dependence. Distancing, avoidance or escape, frequent refusal to search for social support or plan problem solving as well as focusing on the negative aspects of the situation with socio-psychological adaptation are characteristic of students prone to drug addiction. Learning these characteristics will allow a differentiated approach to solving problems of social and psychological adaptation of addicted individuals in professional education.

### Implications and Recommendations

The results of the study can be used in the elaboration of the educational process programs for higher education institutions and will allow to adjust the work of teachers, psychologists, aimed at reducing the inclination of students to chemical dependencies by improving their social and psychological adaptation during the period of study at the university. The results of the study and published documents based on it can be applied in preparation of specialists in the field of social psychology, sociology, psychology and pedagogy. The study materials will be particularly useful in additional professional training for psychological aid staff at universities, experts on educational work.

### Disclosure statement

No potential conflict of interest was reported by the authors.

### Notes on contributors

**Elvira N. Gilemkhanova** - Ph.D.in Psychology, senior lecturer at the Pedagogical Psychology Department at GAOU VPO "Kazan (Volga region) Federal University", Kazan, Russia.

### References

- Andreeva, G.M. (2002). *Social Psychology*. Moscow: Aspekt Press, 376 p.
- Artamonov, J.S. (2016). Telecommunications and information as a global pattern of modern society. *Information Society Technologies. X International Industrial Scientific Conference: Proceedings*, 295 p.
- Bandura, A. (2000). *Social learning theory*. St.Petersburg: Eurasia, 320 p.
- Bayanova, L.F. & Mustafin, T.R. (2016). Factors of compliance of a child with rules in a Russian cultural context. *European Early Childhood Education Research Journal*, 3(2), 355-368.
- Berebin, M.A. & Tishevskoy, I.A. (2013). *The functional and system organization of the phenomenon of human adaptation*. Direct access: <http://www.auditorium.ru/index.php/newsid=869>



- Berezin, F.B. (1988). *The psychic and psychophysiological human adaptation*. Leningrad: Publishing house "Nauka", 270 p.
- Boldachev, A.V. (2005). *Intelligent innovation and adaptation*. Direct access: <http://boldachev.h1.ru/adapt.shtml>
- Chuchelina, E.V. (2007). *Psychological factors of social and psychological adaptation of students in the university environment*: PhD Abstract. St.Petersburg, 30 p.
- Doroshenko, T.E. (2008). *Socio-psychological adaptation as the factor of professional self-concept of high school students*. PhD Thesis. Stavropol, 224 p.
- Festinger, L. (2000). *The theory of cognitive dissonance*. St. Petersburg: Publishing House: Rech, 320 p.
- Fomin, N.A. (2003). *Adaptation: general biological and physiological bases*. Moscow: Publishing House Theory and Practice of Physical Culture, 383 p.
- Freud, Z. (2004). *The basic psychological theories in psychoanalysis*. Translated by M.Wolf, & A.A. Spector. Moscow: Harvest, 400 p.
- Fromm, E. (2009). *Escape from Freedom*. Moscow: AST, 288 p.
- Gilemkanova, E.N. (2012). Features of socio-psychological adaptation of students who are prone to chemical substances addiction. *Kazan pedagogical journal* , 3, 73-80.
- Gilemkanova, E.N. (2013). *Features of socio-psychological adaptation of students prone to alcohol and drug addiction*: PhD Thesis. Kazan, 198 p.
- Godefroy, J. (1992). *What is the psychology*. Moscow: Mir, 302 p.
- Grigorieva M.V. (2010) The concept of "educational environment" and a model of educational environment in the modern national educational psychology. *Scientific notes of SGU Pedagogical Institute named after NG Chernyshevsky. Series: Psychology.Pedagogy*, 4, 54-63.
- Grjaznov, A.N., Cheverikina, E.A. & Tukhvatullina, D.R. (2009). Psycho-pedagogical components of prevention of chemical substances addiction among students. *Kazan Pedagogical Journal* 3, 10-14.
- Klochko, V.E. (2007). Modern psychology: systemic sense of paradigmatic shift. *Siberian Psychological Journal*, 26, 15-21.
- Kryukov, T.L. & Kuftyak, E.V. (2007). Questionnaire of coping ways. *Journal Of Practical Psychologist*, 3, 93-112.
- Kuzmina, V.M. (2006). *Features of socio-psychological adaptation of students in high school*: PhD Thesis. Kursk, 176 p.
- Makarenya, A.A. (1997). *Cultural and creative environment: the status, structure and functioning*. Tyumen: TOGIRRO, 256 p.
- Medvedev, V.I. (1987). *About the problem of adaptation. The components of the adaptation process*. Leningrad: Nauka, 244 p.
- Mendelevich, V.D. (2004). *The problem of drug addiction in Russia: the clash of interests of experts, patients and authorities (clinical and case study)*. Kazan: Shkola, 240 p.
- Maklakova, A.G. & Chermyanina, S.V. (2001). Multilevel personality questionnaire "Adaptability". Practical Psychodiagnostics. *Procedures and tests*. Samara, 549-558.
- Parigin, B.D. (1971). *Fundamentals of socio-psychological theory*. Moscow: Publishing House: Misl, 351 p.
- Parsons, T. (1998). *The system of modern societies*. Moscow: Aspekt Press, 270.
- Piaget, M (1994). *Selected psychological works*. Moscow: International Pedagogical Academy, 597 p.
- Platonov, K.K. (1972). *On the system of psychology*. Moscow: Mysl. 230 p.
- Polonsky V.M. (2004). *Dictionary of education and pedagogy*. Moscow: High School. 512 p.
- Sandberg, H., Weinberger, A. & Taplin, J. (2005). *Clinical psychology*. St.Petersburg: Prime – Evroznak, 384 p.
- Tarasov, A.S. (2011). Educational environment: the concept, structure and typology. *Vestnik Magazin of Leningrad State University named after A.S. Pushkin*, 3, 32-39.
- The concept of socialization of addictive individuals in professional education. (2012). Kazan: Publishing house "Danis" IPP IN RAO, 36 p.
- The Oxford Dictionary of Psychology (2002). In A. Reber (Eds.). Direct access: [vocabulary.ru](http://vocabulary.ru)



- Tsukanov, A.P. (2006). *Tolerance in the structure of the socio-psychological adaptation of the person: On example of students*: PhD Abstract. St.Petersburg, 30 p.
- Volik, M.V. (2008). Adaptation of students to the educational space at college. *Adaptation of collectives of educational institutions to innovation in the education system: Materials of interregional scientific-practical conference on March 18, 2008*. Voronezh VOIPK and PRO, 10-13.
- Vygotsky, L.S. (2005). Educational psychology. Moscow: Publishing house "Smisl", 536 p.