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Adolescents with Intellectual Disabilities: Personal Aspects of Their Developmental Disability

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ABSTRACT

The article deals with the development of inclusive, special and integrated education in regions of the Russian Federation which is connected with socio-cultural changes in modern education. The author underlines the need for continuous improvement of education system and education of children with different development level. The expansion of educational opportunities for children with disabilities and the opportunity to choose the educational path determine the need for an experimental study of factors affecting the success of learning in different educational models. Therefore the article aims to explore self-regulation development of students with intellectual disabilities throughout adolescence ontogeny. The leading methods in the study of this problem are the experimental method, the age method, the comparative analysis method. They allow investigating the following features of the self-regulation structural components: reflection, values, and self-attitude. Also they provide a dynamic system of personal control of teenagers with intellectual disabilities. The author proves that individual self-regulation is in a sensitive period of development throughout adolescence ontogeny. Developmental disability influences its formation, leads to the regulatory system collapse and severe difficulties while teaching young people with intellectual disabilities in an inclusive model. The article may be useful for bachelors and masters of major "Education and pedagogical sciences", for researchers dealing with inclusion issues, and for the teachers while organizing the learning process of adolescents with intellectual disabilities.

KEYWORDS

Lontogeny, developmental disability, adolescence, sensitive period, self-regulation, regulatory system, inclusive education, replacing ontogeny ARTICLE HISTORY Received 13 January 2016 Revised 17 April 2016 Accepted 11 May 2016

Introduction

Urgency of the problem

For a long time the Russian educational system was based on the principle of a differentiated approach to training, practiced separate training and

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education of children with different types of developmental disabilities and rules that do not contribute to personal-social development of children with disabilities. At the present stage of Russian education development schools are restructured in order to take more students. This restructuration is connected with the inclusion principle - the concept of learning when all students learn together. An inclusive approach requires an understanding of various educational needs of children and providing services in accordance with these needs through the participation in the educational process, civic engagement and the elimination of discrimination in education process (Zaretsky, 2005). Inclusion is a two-way process, it requires the formation of new psychological qualities in children and disabled adolescents: activity, confidence, reflexivity, responsibility, self-regulation and some others that will help them to adapt to learning conditions. Besides, educational psychology follows the fundamental truth that the full intellectual development of a child is impossible without the full personal development (Borisenko, 2006). One of the main factors of the individual development is adequately formed mature self- regulation, which leads to self-realization in society.

Significance of the Problem

The effectiveness of disabled child development under inclusive education largely depends on the awakening of incentives for the development and environment optimization. In this context modern psychology and pedagogy turn to the concepts of "essential force", "personal functions", and "self-development force". These concepts have not yet received rigorous scientific definition and understanding, but they reflect the individual's ability to self-development and change. Psychologists A.K. Abulkhanova-Slavskaya (1999), D.A. Leontiev (2006), educators I.Y. Yakimanskaya (2013), E.V. Bondarevskaya (2004) turn to the term "personal self- regulation". Self- regulation is seen at the level of individual, personal organization and at level of process owner (Safonov and Morozova, 2010). As an individual function self- regulation is characterized by an active self-attitude, social and moral attitudes. It also reflects the logic of social behavior and interpersonal relationships, providing socialization. With regard to young people with intellectual disabilities it is associated with the identification and correction of their own position and the disclosure of internal abilities. Therefore it means a subjective activity of adolescents, providing a certain form of behavior and relationships in an inclusive education model.

Problem State

The subject approach (Abulkhanova-Slavskaya, 1999; Petrovsky, 1993) and structural-regulatory approach (Konopkin, 2004; Osnitsky, 1996) are the most important ones in the understanding of the personality formation. The practiceoriented concept of personal self- regulation developed by V.I. Morosanova (2011) (concept of self-regulation style) and by T. Kornilova (2003) (concept of functional-level regulation) are also of great interest. Self- regulation here is treated as a functional tool of the subject, which mobilizes personal and cognitive resources to act and to achieve significant goals (Leontiev, 2006). Empirical data of developmental psychology prove that the sensitive period for the development of personal self-regulation is adolescence, as this age is characterized by the formation and perfection of the personal entities included into the regulation structure. U.V. Ulenkova (1998), a representative of special

psychology, was one of the first who expressed the opinion that mature self-regulation is a characteristic of intellect and personality. Therefore a number of interesting theoretical and applied researches of self-regulation process as a component of preschool and primary school age have been done. They have shown that students with intellectual disorders, namely, mental retardation have common development with normal patterns of self-regulation, with a qualitatively higher development level compared with mental retardation. Science treats self-regulation as an integrated dynamic system with functioning of different levels and aspects of self-regulation. But psychological science has no general opinion on self-regulation as a personal function. At present there are no studies reflecting the dynamics of self-regulation development in adolescence ontogenesis, which is sensitive to its development. The impact of developmental disability on self-regulation formation also hasn't been studied yet.

Hypothesis

Analysis of theoretical studies and practical work has shown that the issues related to personal self-regulation of adolescents with different levels of intellectual development at the stage of adolescence ontogenesis and the influence of developmental disability on this process haven't been studied properly by psychological and pedagogical sciences and in practice. Therefore the hypothesis of the study is the following: personal self-regulation in adolescence is in the sensitive period of its development, it undergoes both quantitative and qualitative changes, but the age-related laws are the same for both normal and abnormal mental development. Violations of the psychic sphere with delayed mental development lead to its qualitative uniqueness. They are reflected in specific features of the structural components of self-regulation: activity, reflection, value orientations; the dynamics of their development, connectivity and mechanisms for the regulation implementation. These peculiarities of personal self-regulation in adolescents with mental retardation may be the basis for the development of recommendations aimed at optimizing its formation in the educational process.

Materials and Methods

Research Objectives

According to the hypothesis of a pilot study the tasks of the research are:

- 1. To analyze theoretically main approaches to the problem of personal self-regulation, as well as its formation in adolescence, that is sensitive to the development of personal self-regulation.
- 2. To systematize and test experimental and diagnostic techniques for 11-16 years old teens with normal development, mental retardation and developmental delay to identify features of personal self-regulation.
- 3. To study experimentally features of the structural components of personal self-regulation in adolescents with normal development, mental retardation and developmental delay, to study the dynamics of their development from 11 to 16 years, the coherence and implementation mechanisms.

- 4. To define common age-related and specific features of personal selfregulation of teenagers; to determine the influence of developmental disability on the formation of personal function in adolescence.
- 5. To develop guidelines based on the principle of replacing the ontogeny and aimed at optimizing the formation of personal self-regulation in adolescents with different levels of intellectual development in the process of inclusive education.

Methodological Principles and Methods

Methodological research principleshave been identified on the basis of the fundamental statements of Russian psychologists about objective laws of mental development of normal and abnormal child. These fundamentals can be found in: L.S. Vygotsky's (1983) theory of cultural-historical development of higher mental functions; achievements of modern psychology in the study of social and historical nature of the human psyche and self-regulation; relationships in the development of personal and intellectual spheres of the human psyche; common age laws in the normal and abnormal mental development of the child, the role of the subjective factor in this process; principles of determinism, consistency and development, basic statements of regulation, its structure, reflection, activity, axiological sphere of the person as the main components of selfregulation. In accordance with the methodology of the research the following methods were used: theoretical understanding and analysis of psychological and pedagogical research data; theoretical and applied modeling program studying the specifics of personal self-regulation in adolescents with different levels of intellectual development; experimental research, including monitoring, testing, questionnaires, standardized interview, expert assessment method; quantitative and qualitative analysis of the results; development of possible psychological and pedagogical recommendations for the optimization of the formation process of personal self-regulation in adolescents with different levels of intellectual development.

Methods of Research

According to the nature of research, some methodologies have been developed, taking into account the structure of the personal self-regulation:

- 1. V.V. Stolin and M. Calvin's (1982) method of self-attitude study: "selfrespect" factor, explores the internal activity of the teenager.
- 2. M.I. Lukyanova's (2001) survey "Valuable orientations of schoolchildren": aims to explore the basic values of adolescence.
- 3. A.V. Karpov's (2004) methods of diagnosing the level of student reflexivity: studies maturity of individual reflective abilities.

Self-regulation as an individual function is reflected in the behavior. Therefore, the experimental part of the study includes methods for studying moral activity of teenagers:

- 1. Methodology "Moral choice": studies teenagers' attitude to moral standards and the level of moral behavior formation (author's version).
- 2. Methodology "What is good and what is bad" adds notions of teenagers' moral experience and allows defining teenagers' moral concepts.



3. Expert assessment of teenagers' moral consciousness allows objectify their subjective perceptions on the moral behavior level. The experts were teachers working in educational and correctional schools.

The method of observation was used at all stages of the study of personal self-regulation in adolescents with different levels of development. It is the leading method while studying children and adolescents with developmental disabilities. Moreover, the focus on the qualitative analysis of the experimental data suggests observation data additions. The reliability of our results was supported by mathematical methods of processing results. The Kruskal-Wallis test was used to check the authenticity of differences. It allowed comparing three samples simultaneously. The criterion "Student" was used to assess the relationship.

Expected Results

According to above-mentioned points we expect to get:

- age dynamics of the structural components of the personal self-regulation;
- new growth by the end of adolescence ontogeny;
- some specific features of the personal self-regulation development under the influence of arrested development a lower level compared with the normal development of its structural components, their connection and the specifics of the age dynamics;
- influence of developmental disability on the personal self-regulation development, it can be seen in the general development trends with adolescents with mental retardation and developmental delay;
- opportunities for adolescents with delayed development in the dynamics of personal self-control, it can be seen in the general normal development trends.

Database

The bases for the research were public and special educational institutions of Kirov. 120 teenagers from eleven to sixteen years with normal development, 125 teens of the same age with delayed development, 130 adolescents with mental retardation and 50 teachers of secondary and correctional schools as experts took part in this experiment.

Proceedings and Description of the Experiment

The first preparatory phase took into account the specifics of using psychological techniques in research activities and limiting their direct transfer to practical use with children and teenagers with deviating development (Shapoval, 2005). At this stage we have formulated the requirements for diagnostic tools: techniques for personal self-control research should meet the objective and tasks of the research, should identify the features of its structural components, should be convenient and accessible in use for adolescents with developmental disabilities, should enable the standardization and mathematical data processing, and also they should define qualitative features of implementation process and the area of child's coming development. To organize the research properly we have defined structural components of self-regulation. Their choice depends on understanding the nature of the phenomenon under study. Theoretical analysis showed that there are various hypotheses about the

structure, functions and laws of the cognoscible subject. When planning research, we relied on the regulation structure proposed by A.S. Sharov (1998). This structure specifies the need to study its main components: axiological sphere of a person, his activity and self-reflection. Then an experimental sample of adolescents with intellectual disabilities was presented in two categories: mental retardation and developmental delay. The control sample included adolescents with normal development according to their age.

The second pilot phase included a comparative study of the personal features development in the dynamics from preteens to senior adolescent. Here we have analyzed the specifics of the self-control development in teens of all ages and different levels of development and have made the comparative analysis of the experimental data. On this basis we have identified age-specific characteristics and personal self-regulation in adolescents with mental retardation; characteristic features of developmental disability; have disclosed the impact of developmental disability on the personal function formation in adolescence ontogenesis.

The third stage dealt with complex guidelines for the personal self-control development in adolescents with intellectual disabilities in the education process.

Results

Specific Features of Personal Self-Regulation in Adolescents with Intellectual Disabilities

During adolescence almost all structural components of personal selfregulation in adolescents with mental retardation change dynamically, but the components of self-control such as: indicators of internal activity, the basic value orientation, reflection, moral concepts and moral consciousness have a lower level of formation at each stage of adolescence ontogeny. It means a lower than normal level of self-regulation in general, such teens have several years delay in their development.

In accordance with the functions characteristics in age crises it is also possible to distinguish a stable period (11-12 years) and the crisis period (13-16 years) in the personal self-regulation development in adolescents with mental retardation, but they have qualitative differences. A stable period is atypical. Atypia is manifested in the closedness of preteens with mental retardation. Their internal relations are characterized by a pronounced protective behavior, avoidance of open relations. As a result, a preteen with mental retardation is not quite aware of what he is, what his personality is, what he wants, he relies on others' opinions. Moreover, he lives with the expectation of negative feelings from other people to him, because he does not always correctly interpret the behavior of others (Matantseva, 2012). Preteens with mental retardation feel even less confident, independent and strong-willed; therefore, they cannot direct and regulate themselves.

The crisis period also has specific characteristics:

1) Indicators formed in a stable period don't fade but rise under the development influence. Teens of 13-14 years become more open, a bit more selfconfident and self-directed, their selectivity decreases; reflective abilities



increase, moral concepts form, but these structures are not interrelated, as the system breaks down at this age.

- 2) By the end of the crisis period a small proportion of adolescence have age growths associated with the appearance of "I", its regulatory role, the inner core of the personality. This proves the existence of the potential of young people with mental retardation to the development of personal self-control. They depend on the depth of psychiatric disorders, causes of these disorders and adolescent living conditions.
- 3. Violations of the psychic development result in qualitative features of the structural components of personal self-regulation, which can be expressed:
- in the inner passivity of teenagers as a lack of ability to organize and develop themselves. It should be noted that the regulation and activity are closely related to each other (Anokhin, 1980). Passivity in combination with mental disorder results in reduced functioning of the mental processes, slow in action reflection, lack of desire for self-knowledge, self-organization, and self-improvement. Due to inactivity adolescents with mental retardation require systematic stimulation of the activity from outside, having difficulties in work, study, communication, behavior;
- inclosedness of adolescents with mental retardation. It is expressed by the lack of the need for self-knowledge and self-disclosure. Inner passivity and secrecy hamper the development of more complex regulatory structures: the value orientations and reflection;
- in a weaker development of the reflection. Adolescents with mental retardation are less aware of means and reasons of their own activity.
 - in a lack of formation of value orientations;
 - in a delayed nature of moral ideas and moral consciousness.

Imperfection of the structural components of personal self-control leads to a violation of the regulation process integrity.

In the entire regulation process of adolescents with mental retardation the role of the regulatory components is significantly reduced. Lack of internal activity does not function internally as realization of meaningful. Therefore, psychological self-activity is limited, as a result the reflection formation is detained; revaluation, rethinking and activity change are not sufficient. Reflection does not fully control the correctness of the chosen forms and types of teenager's actions, the same with feedback. Ultimately, getting inner regulatory experience of adolescents with mental retardation is limited because of the weakness of structural components. Passivity and closedness hamper the development of more complex regulatory structures: the value orientations and reflection.

At each stage of adolescence ontogenesis there are fore regulatory structures which differ from the norm and from mental retardation. There is no significant complexity and the level of regulation mechanisms in adolescents with mental retardation by the end of adolescence ontogeny. At the age of 11-12 not all indicators of activity form the self-regulation mechanism, which we have defined as the basic one, as more complex mechanisms like value and reflexive regulation are based on it. An important prerequisite for the development of the personal self-control structure in adolescents with mental retardation is not sufficient; it is represented by the indicator "closedness", which is an obstacle to

the development of the adolescent's personality. At the age of 13-14 the regulation mechanism cannot be detected. At the age of 15-16 the mechanism is a component "reflecting I", which normal corresponds to preteens. Mechanisms of personal self-regulation in adolescents with mental retardation are delayed in their development. At the age of 15-16 adolescents with mental retardation do not reach the highest value-regulatory level; they are at the level of preteen's regulation.

Adolescents with mental retardation are characterized by "loose" connection between the structural components of the self-regulation. It is expressed in a weak interdependence and mutual influence of indicators of activity, reflection, values and moral concepts on each other. The most poorly represented in the regulation are reflection, value of responsibility, value of I, self-organization and moral concepts. In moral activity adolescents with mental retardation almost do not rely on their regulation. A striking feature of the self-regulation is a structural crisis at the age of 13-14, characterized by the collapse of the system.

Personal self-regulation in adolescents with mental retardation has not only the specific features associated with hypoplasia, delayed development of components and the entire structure of self-regulation. In contrast it has potential for their development. They are expressed in:

- sufficient importance of value "Knowledge", which performs a regulatory role in the self-regulation structure at every age stage. This value reflects the needs of adolescents in understanding reality and the overall development orientation. Such adolescents have a willingness to know everything important in themselves and for themselves, and hence they have the ability to selfdevelopment and self-improvement;
- value I which is formed by late adolescence and demonstrates the basic social needs of adolescents with mental retardation to be a person. This teenager is active in achieving his goals. If a teenager treats himself as a value, it means he has abilities to use I-force correctly and profitably;
- attitude towards himself which motivates social behavior. Communication and control behavior as values of adolescents with mental retardation show the willingness to demonstrate their social position and to express themselves. It is the need in self-affirmation.
 - the growth of reflection which shows the ability to internal development.

Therefore, personal self-regulation in adolescents with delayed development as a complex integrative personality function is characterized by slower development of the most complex structural components, underdevelopment of value orientations, the immaturity of the mechanisms and levels of regulation, disagreement inside the self-regulation system. The most complicated regulatory structures are subject to arrested development, as they are in a sensitive period of their development, therefore, more vulnerable to the negative effects of developmental disability.

On the basis of the general trends in the development of personal selfregulation in adolescents with delayed development and adolescents with mental retardation we have managed to identify structures which are more likely to be influenced by developmental disability.

Features Specific for Development Disability

First of all, it is the underdevelopment of the responsibility value. By the late teens it is not a leading feature, preventing the development of personal

self-control and social activity. There is a direct link between the teenager's responsibility and his actual behavior, since the main function of responsibility is to stimulate social behavior on the basis of understanding the meaning of their activities. Responsibility allows acting in some unclear situations of social interaction and building an optimal behavioral strategy. A negative consequence of the absence of this value is teenagers' social infantilism, which is expressed primarily in the unwillingness to be responsible for his being, work, way of life, and characterized by degradation of personal sense bearing behavior.

The second specific feature is the predominance of the value "the other" over value "I am", which can be connected with the mechanism of social adaptation in developmental disability. Value "I am" involves representations about myself, which are transformed in a certain image "I am", and a teenager treats himself as the whole person. The system of knowledge about yourself and the attitude to yourself is integrated into the self-assessment. Value of personality combines equality of two positions: value "I am" and value "the other". It is expressed in two related plans: in self-awareness and in relations with other people. Value "I am" provide behavior as the subject of activity. Acceptance of value "the other" is expressed in the social orientation to his point of view, his actions and emotional state, there is an opportunity to relate your own behavior with the behavior of others. In relation with the other moral standards, methods of estimation and interaction can be opened and mastered. Position of value "the other" has a special meaning and social impact on the socialization of adolescents.

Third, the closedness of adolescents with intellectual disabilities indicates a blocked mechanism of creative self-development of personality: self-knowledge, self-determination, self-organization, self-actualization, self-improvement.

Thus, the presence of common for some age peculiarities of personal self-regulation in adolescents with delayed development shows the unity of laws of self-control formation in teenagers with normal and delayed mental development. This indicates that adolescents with developmental delays have the potential to develop it under the condition of organized correctional and developmental work. It is possible to achieve the normalization of the process and compensate the impact of developmental disability purposefully forming personality structures, which are included in the components of self-regulation.

Recommendations

Mental disorder affects the whole psychic sphere. It is a systemic defect. Therefore, the formation of personal self-control should be built with the help of system approach and should be based on the principle of "replaced ontogeny". It means each mental function involved in the regulation with regard to their interaction and mutual influence, first of all reflection and all kinds of activity should be formed beforehand. From pre-school age it is necessary to form a complete basis for the formation of personality structures involved in the regulation. In order to do it the inclusive model of education should provide special psychological and pedagogical conditions for their formation in the preschool and early school years.

In preschool years: development of cognitive activity, formation of all types of children's activities, increasing child's independence and autonomy, development of personal position, inoculation of moral guidelines in activity and behavior, raising positive personal qualities;

At younger school age: formation of general aptitude for learning, selfcontrol in educational activity, ability to analyze your own activity, fixation of awareness of student's social role.

Formation of prerequisites for the formation of personal self-control should be carried out in parallel with the development of cognitive abilities of children with intellectual disabilities, as they are directly related to the level of intellectual development.

The effectiveness of the implementation of these conditions depends on the analytical and diagnostic component and the control and evaluation component of inclusive educational process. These tasks are to be done effectively on each lesson and also on some special and individual lessons. Correctional and educational tasks aimed at development of personal self-control can be planned and implemented during some free or special activity.

Discussions

The problem of personal self-control is being developed in a wide range of experimental psychological research: types of subject's conversion of appearance in connection with the need for self-actualization; regulation and self-regulation in the psychology of personality; individual characteristics of self-awareness and self-regulation in any activity; the subject of development, the subject of activity, the subject of life; a regulatory component in the structure of the subject's integrated activity; peers' influence on voluntary behavior of preschoolers; functional structures of self-regulatory mental states; features of mental regulation in the process of psycho-diagnostics of professionally important qualities; personal determinants of professional formation under abnormal and stressful conditions of activity; operational units of regulation in professional activity. The present research enlarges this list in the developmental disability context of self-regulation. In the pilot study we have found that during adolescence there is a dynamic change in major structural components of the personal self-regulation: activity, reflection, values. It indicates that there are qualitative changes in the development and it increases the possibility of teens to get personal self-regulation. From 11 to 16 personal control mechanisms are improving. It is connected with the formation of value-reflexive level of regulation. All this provides the inward displacement of the regulation and allows considering adolescence sensitive to its development. Function formation under developmental disability is characterized as delayed. Development of personal self-regulation is not limited by adolescence, as important components (self-confidence, self-organization and the value "I am") have not yet sufficiently integrated into the system. Besides we don't observe a significant complication of the structural components of personal self-regulation in adolescents with different levels of development by the end of adolescence ontogeny. It shows the possibility of further development of this function in adolescence.

Conclusion

The experimental research has confirmed the assumption that there are common features with normal patterns and the specific features of the formation of personality function in adolescents with intellectual disabilities. Results of the study suggest that adolescents have the systemic disorder in the development of all components of the structure of the personal self-regulation, and hypoplasia of



the entire system of regulation and regulatory mechanisms. The mechanism of "reflecting I" characterizes the dependence of teenagers' behavior on their subjective perception of themselves in others' eyes. It reflects personal immaturity of adolescents with delayed development and mental retardation, and results in the need for external regulation of all types of activity. Adolescents with mental retardation behave mainly situational; adolescents with developmental delays are characterized by greater opportunities for personal self-regulation, which is primarily determined by the intensity and adequate development of reflexive abilities. The revealed features of personal self-regulation in adolescents with intellectual disabilities allow giving recommendations for optimizing the formation process of personal self-regulation in adolescents in inclusive educational space, which are based on the principle of "displaced ontogeny".

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References

Abulkhanova-Slavskaya, K. A. (1991). Life strategy. Moscow: Thought, 299 p.

Anokhin, P. K. (1980). The main questions of functional systems theory. Moscow: Science, 196 p.

Bondarevskaya, E. (2004). The main approaches to improve modern education. Moscow: Publishing Service, 480 p.

Borisenko, E. J. (2006). Formation of schoolchildren's desire for self-development. Bulletin of the Irkutsk State Technical University, 26, 67-68.

Golikov, N. A. (2009). Inclusive education: new approaches to the life quality of children with special educational needs. Siberian Pedagogical Journal, 6 (232-240).

Karpova, A. (2004). The psychology of reflexive mechanisms of action. Moscow: Institute of Psychology, Russian Academy of Sciences, 410.

Konopkin, O. (2004). Total ability for self-regulation as a factor in the subject development. Questions of Psychology, 2 (128-135).

Kornilov, T. (2003). The Psychology of risk and decision-making. Moscow: Aspekt Press, 242.

Leontiev, D. A. (2006). The personal maturity as mediation of personal growth. Cultural-historical psychology of development (pp. 154-161). In: Petukhova I.A. (ed.). Moscow Sense, 250.

Lukyanov, I. (2001). Basic needs of the age as a basis for the development of social competence in adolescents. *Psychological Science and Education*, 4 (41-47).

Osnitsky, A. K. (1996). Problems of research of subject activity. Questions of Psychology, 1 (5-18).

Matantseva, T. N. (2012). Age-specific characteristics and personal self-regulation in adolescents with mental retardation. *Bulletin of the Vyatka State Humanitarian University*, 1 (162-166).

Morosanova, V. I. (2011). Development of the self-conscious theory: the differential approach. *Questions of Psychology*, 3 (132-144).

- Petrovsky, V. (1993). The phenomenon of subjectivity in personality psychology. Doct. Diss. Moscow,
- Safonov, T. S. & Morozova, J.S. (2010). Leveled characteristics of self-identity. Kemerovo State University Bulletin, 3 (100-101).
- Shapoval, I. A. (2005). Methods for study and diagnosis of deviant development. Moscow: TC Sphere,
- Sharov, A. S. (1993). Formation of value orientations and personal behavior. Omsk: OSPU, 91.
- Stolin, V. V. & Calvin, M. (1982). Personal meaning: the structure and shape of the sous-existence in the mind. Bulletin of Moscow University. Series Psychology, 3 (38-47).
- Ulenkova, U. V. (1998). The integration of children with developmental delay in the general education environment: problems and solutions. Interuniversity collection of scientific works of 1998 (p. 9-20), Nizhny Novgorod, Russia, 280.
- Vygotsky, L. S. (1983). Fundamentals of Defectology. Moscow: Science, 368.
- Yakimanskaya, J. S. (2013) Competence approach in education: problems and ways of modernization. Novosibirsk: LLC Sibprint Agency, 159.
- Zaretsky, V. K. (2005). Ten conferences on the special children development ten steps from innovation to norm. Psychological Science and Education, 1, 83-95.