# ADOLESCENT CRISIS AND EDUCATIONAL CRISES OF ADAPTATION TO THE NEXT EDUCATIONAL LEVEL

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**Abstract.** The problem of pupils' adaptation to new educational level is explored from the standpoint of human agency becoming.

194 pupils (84 fifth-graders and 110 tenth-graders) took part in the study. Pupils' agency and psychological resources were surveyed at the beginning of the academic year by Children's Personality Questionnaire (CPQ), Pupils' Motives Questionnaire (fifth-graders), High School Personality Questionnaire (HSPQ), Purpose-in-Life Test, Motives of learning activity Questionnaire (tenth-graders). Adaptation criteria (informational, behavioral and affective) were estimated by expert assessment method and academic performance analysis at the end of the academic year. K-means method of cluster analysis, U-test and Spearman's rank correlation coefficient are used for data analysis.

In each age category of pupils we have found a lot of significant correlation links between the psychological resources and adaptation criteria indicators only in the cluster of pupils with high agency level. So, only pupils with a high level of agency use their psychological resources to successful overcoming of normative educational crises. Thus, without human agency qualities, both the intellectual and personal resources of pupils can remain unused during the period of adaptation and further training, the results of the study demonstrated. The study was funded by RFBR, project # 18-413-400001

**Keywords:** adolescent crisis; human agency; fifth graders; normative age-related crises; normative educational crises of adaptation; psychological resources; tenth graders.

### Introduction

The problem of pupils' adaptation to new learning conditions at the new educational level arose in the 60s of the 20th century (Bozhovich, 1968; Cowen, 1973) and still acute now. Is success of adaptation period depends on "readiness"? What is the readiness to the next educational level? Is it knowledge, motivation, responsibility or something else?

Recent empirical research (Nisskaya, 2018) has shown that school readiness outcomes of primary school pupils depends on preschool educational approach. Also pupils' adaptation is related to teachers' behavior (Rupsiene & Kucinskiene, 2005).

According to V.I. Slobodchicov theory (2008) these adaptation periods are called as normative educational crises. We propose to consider the problem of normative educational crises overcoming from the point of view of human agency becoming.

## Human agency becoming at the stages of ontogeny

The term "agency" is generally used in philosophy and psychology to refer to the ability of individuals to direct their conscious activity to achieving goals. Agency, as a behavioral concept, is an individual's sense of what they can do and what they think they can do. Numerous findings by both foreign and Russian psychologists (Koops, 2017; Borchet et al., 2017; Białecka-Pikul et al., 2017; Belolutskaya & Veraksa, 2016; Polito, Waters, & McIlwain, 2015; McIlwain, 2015; Balconi, 2010; Leontiev, 2010; Slobodchikov, 2008) confirm the agency role in child behavior.

A. Bandura defines agency as ability to intentionally influence one's functioning and the course of environmental events (Bandura, 1989). M. Hewson determines agency as a condition of activity rather than passivity. It refers to the experience of acting, doing things, making things happen, exerting power, being a subject of events, or controlling things. This is an aspect of human experience (Hewson, 2010). H.R. Markus and S. Kitayama proved that psychological process organization (e.g. attention, perception, cognition, emotion, motivation, interpersonal relationship) depends on the cultural and social specification of agency (Markus & Kitayama, 2010).

In Russian psychology the conceptual term of agency has synonyms: "subjectivity" and "subject activity". According to K.A. Abulkhanova, one of the most important criteria of agency is capacity to use one's abilities, personal traits, mental capabilities and skills to solve problems and achieve goals (Abulkhanova, 2005). Agency formation in childhood means a gradual development of a child's self-consciousness as a result of several age crises.

V.I. Slobodchikov defines agency formation as the main task of the personalization stage (at the age of 7-18) – «the culmination period of personal development» (Slobodchikov, 1991). Each development stage, according to Slobodchikov's theory, is the cycle including the periods of becoming and implementation. The period of becoming starts with "birth crisis" caused by the need for a new social role. The period of implementation starts with "developing crisis" (caused by the need for a self-realization in this social role.

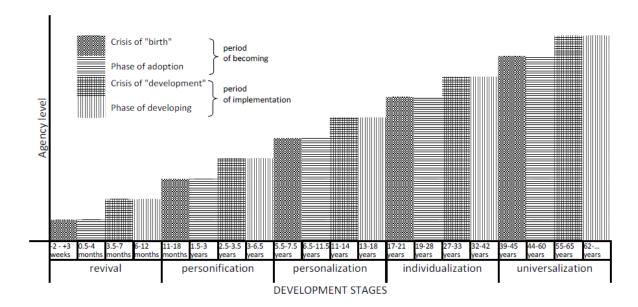


Figure 1 Development stages and agency level (according to V.I. Slobodchicov's theory)

The human agency criterion at the stages of ontogeny is the effectiveness of solving age-related development tasks – the age norms of a child's consciousness.

According to cultural-historical psychology (Vygotsky, 1983), age-related crises happen when the social situation of development changes: a new level of child consciousness appears, while his social relationships remain the same.

But in modern society educational conditions in schools and universities are more and more often changed without taking into account pupils' needs (Samokhvalova & Kryukova, 2016; Symanyuk & Pecherkina, 2016; Akçinar, 2013; Karabanova, 2010; Deci et al., 1991). On the one hand this leads to some changes in the psychological context of age-related crises (external conditions are changed before internal needs), but on the other hand, it results in the destructive course of educational crises (new educational conditions and demands came without "needs and aspirations").

Adolescence is the most problematic period of schooling. At the age of 11-12 adolescence crisis begins, caused by the need for a self-consciousness. Children of this age try to understand and realize themselves in different activities. And very often these activities can be asocial. They get punished and start looking for themselves again. And so on. This crisis is often delayed in time and may remain without resolution. That is why the adolescent crisis synchronization with crises of fifth-grades or ten-grades adaptation to the next educational level may lead to negative emotional state as well as to problems in learning, behavior. We hypothesized that fifth-graders with a high level of agency, whose inner schoolchild position has been preserved, as the adolescence

crisis did not begin, will use their intellectual resources and personal traits to adaptation crisis successful overcoming. And also ten-graders with a high level of agency, whose self-consciousness and I-concept has been formatted as a result of adolescence crisis resolution, use their personal resources to adaptation crisis successful overcoming.

#### Method

194 pupils (84 fifth-graders and 110 tenth-graders) took part in the study. The pupils' abilities and personal traits at the beginning of the academic year were surveyed using CPQ (Rukavishnikov, 2000), Pupils' Motives Questionnaire – fifth-graders; HSPQ (Rukavishnikov, 2000), Purpose-in-Life Test (Leontiev, 2002) – tenth-graders (Table 1).

The adaptation criteria (informational, behavioral and affective) were defined in accordance with B.F. Lomov's systemic approach. The adaptation criteria were estimated at the end of the academic year using the expert assessments method and academic performance analysis. To study the educational activity, we used the questionnaire for teachers, who estimate learning and communicative activity of pupils and documentation analysis (absence from school/university).

Table 1 Methods of agency indicators' and psychological recourses' assessing

	Agency indicators	Recourses
		(abilities and personal traits)
Fifth-	Rule consciousness (G), self-discipline	RPM Raven Progressive Matrices
graders	(Q3), motives of achieving (MA) and	test; CPQ
	self-development (MS)	
Tenth-	Goals in Life – (GL); Locus of Control	RPM Raven Progressive Matrices
graders	(LCI, LCL); motive of profession	test; HSPQ
	training (MP); rule consciousness (G),	
	self-discipline (Q3)	

For analysis of each educational crisis results we (1) divided each sample of pupils into homogeneous groups (with similar level of agency indicators) by the k-means method of cluster analysis; (2) compared agency indicators, abilities and personal traits in these groups by U-test; (3) explore correlation links between the psychological resources and adaptation criteria indicators in each group by Spearman's rank correlation coefficient. The Statistica v.13 software program was used for computations. Before the cluster analysis, the data were standardized (Z-score). Clarity of division into clusters was evaluated

using U-test. Scales of measurement and sample volumes allowed using U-test and Spearmen correlation coefficient.

## **Results and discussion (fifth-graders)**

84 fifth-graders from municipal schools of Obninsk and Baikonur took part in the empirical study. The agency characteristics were measured in September by CPQ (G and Q3 factors) as well as School Motives Questionnaire (motives of achieving MA and self-development MS). The adaptation criteria were estimated at the end of the academic year using the expert assessments method and academic performance analysis.

To begin with, by using the k-means method of cluster analysis we divided all the pupils into clusters with similar agency characteristics. Cluster 1 (67%) included pupils with high level of agency. Cluster 2 (33%) included pupils with low level of agency (Fig. 2).

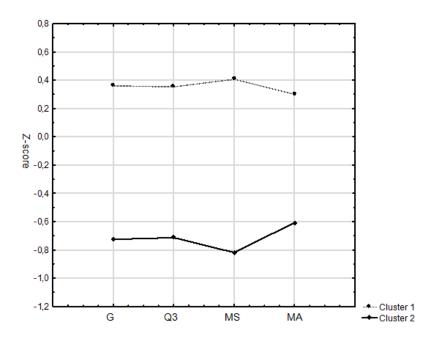


Figure 2 Agency characteristics in clusters: G, Q3, motives of achieving (MA) and selfdevelopment (MS)

The differences between the clusters were proved for every characteristic by the U-test (p < 0,000). It should be emphasized that we did not find any statistically significant differences in intellectual level (measured by RPM) between the clusters of pupils (U=189,5; p=0,65). The fifth-graders from Cluster 2 are characterized by a statistically significant higher level of factors D, E, F, O, Q4 (Fig. 3). These are the signs of the adolescence crisis beginning of fifth-graders from Cluster 2.

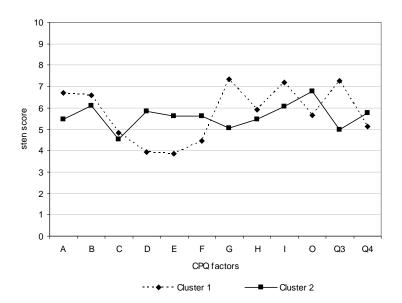


Figure 3 Personal traits in clusters of fifth-graders (measured by CPQ)

To explore the peculiarities of intellectual and personal resources application to adaptation crisis overcoming we calculated Spearman's rank correlation coefficient between the RPM and CPQ results and the indicators of adaptation criteria in both clusters of fifth-graders (Fig. 4).

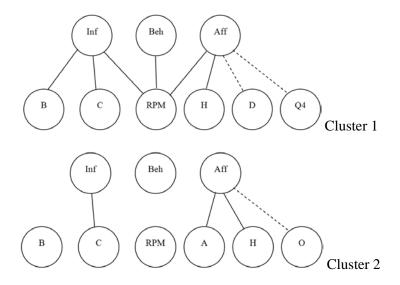


Figure 4 Correlations between RPM and CPQ results and adaptation criteria indicators in clusters of fifth-graders

We have found a lot of statistically significant correlation (p<0.05) between these parameters in Cluster 1. In Cluster 2 only isolated correlations were found. We have noted the absence of statistically significant correlations between the RPM result and the indicators of adaptation criteria in Cluster 2. This confirms

our hypothesis that fifth-graders with a high level of agency, whose inner schoolchild position has been preserved, as the adolescence crisis did not begin, will use their intellectual resources and personal traits to adaptation crisis successful overcoming.

## **Results and discussion (tenth-graders)**

110 ten-graders from municipal schools of Obninsk and Baikonur took part in the empirical study. The agency characteristics were measured in September by HSPQ (G factor), Purpose-in-Life Test (Goals in Life, Locus of Control scales) as well as Motives for learning activities of pupils Questionnaire (MP – motive of professional training scale). The adaptation criteria were estimated at the end of the academic year using the expert assessments method and academic performance analysis.

To begin with, by using the k-means method of cluster analysis we divided all the pupils into clusters with similar agency characteristics. Cluster 1 (72%) includes pupils with high level of agency. Cluster 2 (28%) includes pupils with low level of agency (Fig. 5).

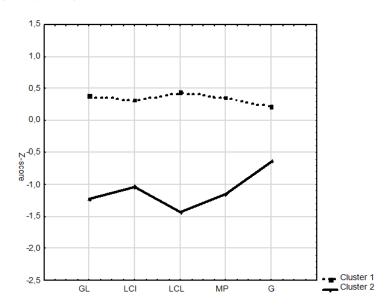


Figure 5 Agency characteristics in clusters: Goals in Life – GL; Locus of Control – LCI, LCL; motive of profession training MP; G factor

The differences between the clusters were proved for every characteristic by the U-test (p < 0.001). It should be emphasized that we did not find any statistically significant differences in the intellectual level (measured by RPM) between the clusters of pupils. Comparing the pupils' personality characteristics (Fig. 6) we can make the following conclusions. The ten-graders from Cluster 1

are characterized by a statistically significant higher level of factors A, C, F, H and lower level of factors J, O, Q2. These are the signs of the adolescence crisis resolution of ten-graders from Cluster 1.

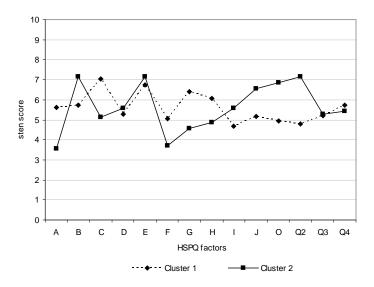


Figure 6 Personal traits in clusters of ten-graders (measured by HSPO)

To explore the peculiarities of intellectual and personal resources application to adaptation crisis overcoming we calculated Spearman's rank correlation coefficient between the RPM and HSPQ results and the indicators of adaptation criteria in both clusters of ten-graders. We have found statistically significant positive correlation (p<0.05) between personal characteristics and adaptation criteria indicators in Cluster 1 (Fig. 7).

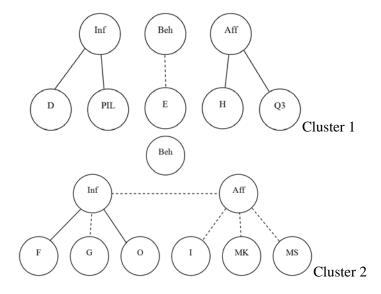


Figure 7 Correlations between the personal traits and adaptation criteria indicators in clusters of ten-graders

In Cluster 2 mostly negative correlations were found. We have noted the absence of a statistically significant correlations between the RPM result and the indicators of adaptation criteria in both clusters.

This confirms our hypothesis that ten-graders with a high level of agency, whose self-consciousness and I-concept has been formed as a result of the adolescence crisis resolution, use their personal resources to successful overcome the adaptation crisis.

### **Conclusions**

The results are demonstrated that pupils' agency is the key factor of normative educational crises successful overcome. In both age category of pupils we have obtained the same result: in the group of pupils with high level of agency indicators (Cluster 1) we can see many positive correlation links between indicators of psychological resources and indicators of result of adaptation crisis overcome. Whereas in the group of pupils with low level of agency indicators (Cluster 2) we can see only isolated correlation links. Consequently, educational results in Cluster 1 are determined by pupils' recourses. But we couldn't say the same about pupils in Cluster 2. This explains why smart, good children do not learn well. Similar results were obtained in other age groups of pupils and students (Leonova, 2018).

The causes of school maladjustment have changed over the past 50 years. In the XX century they included anti-social, acting-out behavior; intra-personal distress and tension; interpersonal ineptitude; developmental problems (Glidewell & Swallow, 1969), but now the main reasons are lack of engagement and interest (Wong et al., 2017).

Lack of engagement and interest in learning is a consequence of not only curriculum specificity, but unresolved age-related development tasks i.e. low agency level. That is why pupils` resources may remain unfulfilled without agency qualities, as the study results have confirmed.

Further research may be as follows.

- Studies of normative adaptation crises at a new educational level in samples of schoolchildren from other countries (in accordance with the specifics of national educational systems). These studies can give answer the questions: why, despite education reforms, investment and the effort expended, many pupils cannot successfully adapt to school as well as why smart and intelligent kids performing poorly.
- Studies of existential adaptation crises caused by problems of acceptance, bullying, pupil-teacher relationships, etc.

#### References

- Akçinar, B. (2013). The Predictors of School Adaptation in Early Childhood. *Procedia Social and Behavioral Sciences*, 93, 1099-1104.
- Asmolov, A.G. (2013). Strategy and methodology for the sociocultural reform of education. *Psychology in Russia: State of the Art, 6, 3-20*
- Barber, B.K., & Olsen, J.A. (2004). Assessing the Transitions to Middle and High School. *Journal of Adolescent Research*, 19(1), 3-30.
- Balconi, M. (2010). *The Sense of Agency in Psychology and Neuropsychology*. In Michela B. (eds) *Neuropsy-chology of the Sense of Agency*. Springer, Milano Retrieved from https://doi.org/10.1007/978-88-470-1587-6\_1
- Bandura, A. (1989). Human Agency in Social Cognitive Theory. *American Psychologist*, 44, 1175–1184.
- Belolutskaya, A., & Veraksa, N. (2016). *The multidimensionality of thinking in the context of creativity studies: structural-dialectical approach.* European Society for Research in Adult Development. Book of Abstracts. Hague, Netherlands.
- Białecka-Pikul, M., Kołodziejczyk, Bosacki, S., & Szpak, M. (2017, August). *Self-understanding in Adolescence: Dimensions, Development, and Stability*. Paper presented at the 18th European Conference on Developmental Psychology, Utrecht. Retrieved from http://www.ecdp2017.nl/wp-content/uploads/sites/43/2017/08/ECDP2017-Abstract-book-V2.compressed.pdf
- Borchet, J., Lewandowska-Walter, A., Połomski, P., Peplińska, A., & Kaźmierczak, M. (2017, August). *The role of sibling in relation between self-esteem and parentification in adolescence*. Paper presented at the 18th European Conference on Developmental Psychology, Utrecht. Retrieved from http://www.ecdp2017.nl/wp-content/uploads/sites/43/2017/08/ECDP2017-Abstract-book-V2.compressed.pdf
- Cowen, E.L., Dorr, D., Clarfield, S., Kreling, B., McWilliams, S.A., Pokracki, F., ... & Wilson, A. (1973). The AML: A quick-screening device for early identification of school maladaptation. *American Journal of Community Psychology*, *I*(1), 12-35.
- Deci, E.L., Vallerand, R.J., Pelletier, L.G., & Ryan, R.M. (1991). Motivation and education: The self-determination perspective. *The Educational Psychologist*, 26, 325-346.
- Glidewell, J.C., & Swallow, C.S. (1969). *The prevalence of maladjustment in elementary schools*. (Report prepared for the Joint Commission on the Mental Health of Children. Chicago: University of Chicago Press.
- Hardy, C.L., Bukowski, W.M., & Sippola, L.K. (2002). Stability and Change in Peer Relationships during the Transition to Middle-Level School. *Journal of Early Adolescence*, 22, 117-142.
- Hewson, M. (2010). Agency. In A. Mills, G. Durepos, & E. Wiebe (Eds.) *Encyclopedia of case study research* (pp. 13-17). Thousand Oaks, CA: SAGE Publications.
- Karabanova, O.A. (2010). Social Situation of Child's Development the Key Concept in Modern Developmental Psychology. *Psychology in Russia: State of the Art, 3*, 130-153
- Koops, W. (2017). *The role of agency in adolescent research*. Paper presented at the 18th European Conference on Developmental Psychology, Utrecht. Retrieved from http://www.ecdp2017.nl/wp-content/uploads/sites/43/2017/08/ECDP2017-Abstract-book-V2.compressed.pdf
- Leontiev, D.A. (2010). What the Concept of Subject Contributes to Psychology: Agency as a Personality Dimension. *Epistemology & Philosophy of science*, 25(3), 135-153.

- Proceedings of the International Scientific Conference. Volume VII, May 24th -25th, 2019. 86-96
- Markus, H.R., & Kitayama, S. (2010). Cultures and Selves: A Cycle of Mutual Constitution. *Perspectives on Psychological Science*, 5(4), 420–430.
- Nisskaya, A.K. (2018). School readiness outcomes of different preschool educational approaches. *Psychology in Russia: State of the Art*, 11(1), 43-60.
- Polito, V., Waters, F.A.V., & McIlwain, D. (2015). Sense of agency: Theory, methods, and application. *Psychology of Consciousness: Theory, Research, and Practice*, 2(3), 207-209.
- Raven, J., Raven, J.C., & Court, J.H. (2000). *Raven Manual: Section 3. SPM Manual (Including the Parallel and Plus Versions).* 2000 Edition. Oxford: Oxford Psychologists Press.
- Rupsiene, L., & Kucinskiene, R. (2005). Influence of Teachers' Behaviour on Students' Adaptation after School Transition. *ERIC: Reports-Research. ED490657*; EBSCO.
- Samokhvalova, A.G., & Kryukova, T.L. (2016). Communication difficulties in teenagers with health impairments. *Psychology in Russia: State of the Art, 9*(3), 113-126.
- Symanyuk, E.E., & Pecherkina, A.A. (2016). Psychological predictors of inhibition development in educational environments. *Psychology in Russia: State of the Art*, 9(3), 127-140.
- Wong, T. (2017, August). An International Perspective on School Climate and Skipping School Among Youth: Japan, Canada, Turkey, and Hong Kong. Paper presented at the 18th European Conference on Developmental Psychology, Utrecht. Retrieved from http://www.ecdp2017.nl/wp-content/uploads/sites/43/2017/08/ECDP2017-Abstract-book-V2.compressed.pdf
- Абульханова, К.А. (2005). Принцип субъекта в отечественной психологии. *Психология*. *Журнал Высшей школы экономики*, 2. 4, 3-21
- Божович, Л.И. (1968). Личность и ее формирование в детском возрасте. М.
- Выготский, Л.С. (1983). Проблемы развития психики. Собрание сочинений: Т.З. М.: Педагогика.
- Леонова, Е.В. (2018). Становление субъектности в нормативных возрастных и образовательных кризисах. Монография. Калуга: КГУ им. К.Э. Циолковского. Леонтьев Д.А. (2008). Тест Смысложизненных ориентаций М.: Смысл.
- Леонтьев, Д.А. (2010). Что дает психологии понятие субъекта: субъектность как измерение личности. Эпистемология & философия науки=Epistemology & Philosophy of science. Т. 25. № 3. С. 135-153
- Реан, А.А. (2001). Практическая психодиагностика личности. СПб.
- Рукавишников, А.А. (2002). *Факторный личностный опросник Р. Кеттелла*. Методическое руководство. СПб: Иматон
- Слободчиков, В.И. (1991). Категория возраста в психологии и педагогике развития. Вопросы психологии, 2, 37-49.
- Слободчиков, В.И. (2008). Антропологический смысл кризисов перехода в развитии и образовании. *Психология обучения*, 1, 4-25.