

# Professional Independence and Stress Resistance of Teachers in Preschool Educational Organizations

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**Keywords:** Teacher, Preschool Educational Institution, Professional Independence, Stress Resistance.

**Abstract:** Teaching activity belongs to the group of professions "Man-Man". Basically, people with sufficiently developed socio-psychological competencies come and stay in the teaching profession, but the high level of tension in educational interaction and its negative impact on the quality of pedagogical activity makes such aspects of readiness and ability for professional activity as stress resistance and professional independence of a specialist especially important. Relationships in the educational process are not only an integral, but also an obligatory part of the profession, even if a person does not have natural tendencies for active and frequent, intense interaction with other people. In modern pedagogy and psychology, there are and are currently published quite a few works in the field of independent (autonomous, self-governing) pedagogical education, there are also few methodological developments aimed at the development of professional independence (independence, initiative, autonomy, self-determination, self-regulation, self-education) of teachers. The purpose of this study is to study the problem of the formation and development of professional independence / autonomy of preschool teachers as a factor of their resistance to stress in professional situations. Conceptualization of the concept of professional independence (independence or autonomy) of preschool teachers should include the following aspects: subjectivity / initiative and independence / autonomy; creative attitude and search activity, reflection and critical comprehension of reality; dialogue and feedback, responsibility / consistency (implementation) of freedom of choice; high stress resistance and experience of successfully coping with failure, experience of achievements - social efficiency and self-efficacy, experience of interaction with successful and unsuccessful colleagues and mentors; self-actualization and transcendence, the experience of raising successful children ready for the school stage.

## 1 INTRODUCTION

Teaching activity belongs to the group of professions "Man-Man". Basically, people with sufficiently developed socio-psychological competencies come and stay in the teaching profession, but the high level of tension in educational interaction and its negative impact on the quality of pedagogical activity makes such aspects of readiness and ability for professional activity as stress resistance and professional independence of a specialist especially important.

Relationships in the educational process are not only an integral, but also an obligatory part of the profession, even if a person does not have natural tendencies for active and frequent, intense interaction with other people. In modern pedagogy and psychology, there are and are currently published quite a few works in the field of independent (autonomous, self-governing) pedagogical education, there are also few methodological developments aimed at the development of professional independence (independence, initiative, autonomy, self-determination, self-regulation, self-education) of

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teachers (Chuk, 2017; Moreira, Viera and Marques, 1999; McGrath, 2000; Vieira, 1999; Smith, 2021; Thavenius, 1999). In addition to terminological problems, a more serious issue is related to the overall complexity of assessing the development of teacher autonomy. This issue is most actively developed by foreign researchers of educational and professional independence, autonomy and "self-determination" (self-determination, Ryan and Deci, 2018) of a teacher, but in recent years many Russian researchers have also joined them (Kolomiets, 2020; Kolomiets and Golubchikova, 2019).

## 2 MATERIALS AND METHODS

The purpose of this study is to study the problem of the formation and development of professional independence / autonomy of preschool teachers as a factor of their resistance to stress in professional situations. The main research method is a phenomenological theoretical analysis of the formation and development of professional independence / autonomy of teachers as a factor of their resistance to stress in professional situations, comparative analysis of the resistance to stress of teachers with different levels of professional autonomy / independence. In the empirical part of the study, a survey method was used: teachers of preschool institutions, secondary schools and universities of Irkutsk were asked to answer a number of questions in the form of a detailed written self-report. The results obtained in the course of a survey of 150 respondents (50 university teachers, 50 school teachers and 50 preschool teachers) were processed by the method of content analysis (qualitative and quantitative data analysis), general trends and phenomena were identified, reflecting the interconnection of teacher resistance and independence. The novelty of the research we are implementing lies in an attempt to theoretically substantiate the relationship between the processes and results of the formation and development of professional independence of teachers with varying degrees of stress resistance.

## 3 RESULTS AND DISCUSSION

In modern foreign and Russian pedagogy and educational psychology, within the framework of competence-based, activity-based, value-based and other modern, as well as many traditional approaches

to the organization of education, the idea of the teacher's independence as meta-ability or metacompetence (meta-competence system) is formed, ensuring the achievement of the professional and general cultural educational outcomes. This includes such results as the upbringing and training of preschool children: 1) the skills of self-government, independence, including in situations of labour for children, causing them stress or associated with conflicts of internal and external types; 2) readiness and ability to learn, transform and respond correctly in educational and training situations; 3) readiness and ability to jointly solve educational and domestic problems with other children and adults, including the ability and desire to settle conflicts, overcome stress, etc.

K. Travenius (Thavenius, 1999) defines the independence or autonomy of the teacher as "the ability and willingness to help students take responsibility for their own learning." D. Little (Little, 1995) sees it as the presence of an intense sense of individual responsibility for their learning and teaching students, carried out in the process of continuous monitoring and understanding the limits of educational and professional (affective, cognitive, behavioural) control of educational and the professional process; and the pursuit of exploring the effects of free learning. R. Smith and S. Erdogan (Smith and Erdoğan, 2008) identified two aspects of teacher autonomy: the ability to develop independently and freedom from control by others. Other scholars and practitioners argue that such freedom rarely exists in an educational setting, especially in the early stages of education (preschool and high school).

"Teacher autonomy is not about being free from external constraints and acting according to one's desires, but... about being ready and able to challenge undemocratic traditions, developing as a professional sense of free will in teaching, which is directly related to promoting student subjectivity in learning" (Rayo and Vieira, 2015).

I. McGrath describes "teacher autonomy" as self-directed professional actions for self-development and freedom from outside influence when choosing educational actions (McGrath, 2000). B. Zimmerman notes the need to provide students with support aimed at the formation and development of independence in the development of creative and other "autonomous" abilities, that is, the abilities necessary for independent learning and, later, work in the preschool educational institution. It is also important for teachers to promote the formation and development of independence in preschoolers (Zimmerman, 2008).

In general, the basic characteristics of teachers' autonomy are related to values and goals, willingness and ability, behaviour and interaction about taking responsibility for their work. Usually, the professional independence of a teacher, knowingly or spontaneously, sooner or later becomes the educational and professional independence of his pupils. The assignment of models of behaviour and interaction, meanings and ways of understanding reality, goals and values of a teacher by preschoolers occurs as a result of his explicit or implicit perception as a role model - a significant / referent individual acting as a subject of management, delegating responsibility and management to a student, as a source of feedback and evaluative activity (correctness / productivity, efficiency / effectiveness and overall success of activity), as a translator of cultural norms, related prescriptions and prohibitions of culture, including prohibitions and prescriptions about subjectivity (independence). On the other hand, the influence of the family can be significantly more significant, so there can be failures and ambiguous situations.

The process of forming general independence / autonomy includes a number of stages: raising the teacher's awareness, changing the attitude towards the very process of education in preschool educational institutions, working with children and their parents, changing the role / position of the teacher from a passive object to an active subject (Scharle and Szabo, 2000).

Of particular importance is the readiness of teachers for professional independence, independence and autonomy, including independent and responsible behaviour in stressful situations. It acts "as a starting point for autonomous activity and a consequence of past learning experiences (Higgs, 1988) and as a factor in the development of the preschool teacher's wards of their own independence. It is also important to determine the relationship between the concepts of independence, independence or autonomy of preschoolers and independence / independence or autonomy of teachers. H. Holec (Holec, 1981) imagines the first group of concepts as the ability of preschoolers to take responsibility for their own behavior in a group of preschoolers, for their interactions with other preschoolers and a teacher. Other researchers and practicing educators see student autonomy as attitudes towards ECE and life in general, self-confidence (Booth and Guinamard & Lloyd, 2017; Brown and Smith and Ushioda, 2007; Benson, 2005; Scharle and Szabó, 2000).

In general, many studies show that preschool children tend to have a positive attitude towards independence, demonstrate the potential to become even more independent, but often demonstrate a "moderate" frequency of attempts at self-command in and out of the group (Evans, 2014; Smith, 2008; Irie and Stewart, 2012; Kuchah and Smith, 2011).

Resistance to stress can be considered both as a property that affects the result of activity (success-failure), and as a characteristic that ensures the homeostasis of an individual as a system. Based on this, stress resistance is an indicator of the quality of professional activity (extrapersonal, social), as well as the quality of (intra)personal and interpersonal development. When the potencies of the subject do not correspond to the specific requirements and conditions of professional activity, the "internal" personal and interpersonal components of stress resistance are more clearly manifested. The role of these components is to develop a system of protection of the individual from stress factors, which provides stability (protection) from the development of a distress state. However, these factors work depending on how much they are formed, including how independent an individual is in his / her life in general and his / her profession in particular.

Some authors consider resistance to stress as the result of training, but it should be remembered that each individual has a certain set of traits and characteristics that determine his resistance to stress. When analyzing human traits and characteristics that can provide influence on stress resistance, many researchers in one way or another emphasize the importance of self-regulation, independence. Independence, being a factor associated with the processes and results of social adaptation and maladjustment of the individual as a person, partner and professional, is the feature that increases stress tolerance under stressful conditions of activity. An individual's resistance to stress is associated with the ability to focus on specific goals, as well as with the organization of their activities and the nature of the temporal and spatial perspective (including the space and time of social relations, one of their characteristics is independence and its components). So, the level of subjective control, which reflects the independence, independence and activity of a individual in achieving his / her goals, personal responsibility for his / her actions and deeds, has a close relationship with stress resistance. According to studies of this characteristic (J.V. Rotter, S.V. Subbotin), researchers emphasize a more pronounced stress resistance of individuals with an internal locus of control (Subbotin, 1992).

Of particular interest in studies of stress resistance is devoted to the problem of active, independent, search coping strategies of behavior (R. Lazarus, R. Thoits). Coping behavior is an individual way of human interaction with a difficult life situation, characterized by demands that exceed an individual's resources. This is a combination of cognitive, behavioral and emotional efforts of a conscious nature and aimed at resolving or changing a critical situation, or a combination of efforts that allow you to get used to a situation or to evade its demands. To develop constructive coping styles of behavior in difficult life circumstances, it is extremely important to understand the essence of stress resistance as a phenomenon that is clearly associated with the characteristics of an individual's independence.

In the empirical part of the study, a survey method was used: teachers of preschool institutions, secondary schools and universities of Irkutsk were asked to answer a number of questions in the form of a detailed written self-report:

- How stressful is the setting in the educational institution in which they work?
- What are the main sources and types of stress that educators face in these educational institutions?
- How independent do teachers feel in solving everyday and critical professional tasks?
- To what extent do they strive to develop the independence of the wards? How is their desire and ability to be independent connected with the self-activity of their children under guardianship?
- To what extent do they strive to develop stress resistance in their wards? How is their stress tolerance related to the stress tolerance of their wards?

The stressfulness of interaction in preschool education is a rather serious problem and the social stress factor is identified as significant by up to 24% of the preschool teachers we surveyed (25 preschool teachers and 25 teachers of "children's homes" took part in the survey) and at least 20% of teachers from other organizations (50 teachers of secondary schools and 50 university professors).

There are three main subjects of interaction in preschool education: teachers, parents and children. Each of these groups of subjects potentially has its own stressful characteristics. The study of stressful contacts in "children's homes" and other preschool educational institutions has revealed some important points. Firstly, in each group of children there are children with developmental or (family) upbringing disabilities, with whom it is difficult for the educator

to establish productive interaction; their behaviour is often stressful for themselves, other children, parents and teachers. The very mass of children with still only formative skills of self-regulation and independence can serve as a stress factor for the teacher: if the teacher does not have developed independence as a person, partner and professional, then he may face an increase in the state of stress. Parents as a group can also generate stress in the educator due to their performance of an indirect control function, presentation of unrealistic and quasi-professional requirements and unrealizable expectations, as well as simply due to insufficient socio-psychological competencies, conflicts and a state of distress. The group of peer educators also potentially and often actually carries their share.

Stress there are potential in several areas: the joint result of work may depend on interaction with colleagues; in preschool educational institutions, teachers usually work in twos, in cooperation with an assistant educator, they also collaborate with specialists in other professions (speech therapists, teachers of defectologists, educational psychologists, and music directors, instructors in physical culture or swimming. The organization of the professional activity of a preschool teacher also depends on the senior educator or methodologist, on the head of the preschool educational institution, on the work of auxiliary personnel (cooks, building maintenance workers, etc.). In addition, teachers interact with medical personnel, etc. It is necessary to be able to cooperate with them, on the one hand, and to be able to maintain autonomy and independence, on the other hand. At the same time, some of the above specialists perform the functions of direct or indirect control; the same function is performed by supervisory authorities (Bagadaeva and Golubchikova, 2017; Bagadaeva, 2020).

Usually, preschool teachers do not single out a group (mass) of children and colleagues as a significant stressful contact, which is due to the peculiarity of the child contingent and the favourable psychological climate in preschool educational institutions, close work in a group with only one "partner". Parents most often become the main source of stress: they are noted by 86% of preschool teachers, 50%: secondary school teachers and 33% of university teachers. The second most important stressor is an individual child in the group (26% in preschool education, 70% in secondary school, and 54% in university). In pre-school type "child's home" educators work with difficult children, most of whom have disabilities of health, both physical and mental. Therefore, the picture is different here: up to 88% of

educators single out one individual child in a group as a stressor. A large number of children cause stress for 46% of teachers. At the same time, work in a children's home involves the simultaneous cooperation of a whole team of teachers, dialectologists, nurses or nurses, paediatricians and other specialists (music director, swimming instructor, educational psychologist, epidemiologist). Colleagues exercising indirect control over the activities of the teacher stress 58% of the teachers at the orphanage. The environment of the institution determines the psychological climate, which affects the mental health of the teacher, and that, in turn, affects the mental health of the child, the formation of his / her behavioural stereotypes, protective mechanisms, etc.

In general, a teacher's resistance to stress is associated with harmonious frustration and non-accusatory behaviour, which determines the independence and other characteristics of tactics of behaviour in stress and strategic aspects of stressful interaction. Among the teachers who noted high stress resistance, there are many who consider themselves independent. They consider independence and freedom of action in conflict and crisis situations that generate stress as an important factor in overcoming stress, preventing distress and general stress resistance (54% of preschool teachers). The teachers, who noted the low level of independence (28%) the painful feelings of being limited and dependent on the administration, the whims of the parents and the behaviour of children, also had higher self-assessments of exposure to stress and a general assessment of the stressfulness of the profession. Among teachers of secondary (24%) and higher schools, the ratio of teachers (36%) demonstrating resistance to stress and its absence is approximately the same, with a slight increase in the proportion of teachers who cannot cope with stress in the university: which is not so much due to the stresses associated with educational activity, how much with the bureaucratic procedures serving it, which teachers are forced to fulfil, regardless of the damage to their main load and functions, as well as damage to education as a whole.

Teachers demonstrating independence also noted that their children, on the whole, are inclined to independence and are rather calm (30%), that they manage to build good relations with their parents (28%) and the administration (32%). On the contrary, teachers who noted the problems of limited resources and dependence noted the "whims" of children (24%), their parents (26%), administration and other employees (22%) as stress factors, more often

recorded increased confidentiality in relationships and stress.

There is a significant gap between the extent to which preschool educators declare / promote the development of self-activity and the advisability of involving their wards in making certain decisions concerning them, and the real behavior of teachers, more or less embodying in real relationships forms of education and upbringing that presuppose and provide educational and professional independence of students and students (Arpentieva and Menshikov, 2017; Arpentieva and Gasanova, 2020; Chik and Aoki and Smith, 2018; Lin and Reinders, 2019; Borg and Al-Busaidi, 2012)

In general, both the readiness of preschool pupils and the readiness of educators for independence are the most important precursors, conditions for the successful implementation of their activity and development tasks, including the tasks of overcoming conflicts and stresses associated with normative and quasi-normative crises of age and professional development. (Arpentieva and Gasanova, 2020; Arpentieva and Menshikov, 2017).

There is a high positive correlation between the level of stress resistance and the development of professional independence. The higher the stress resistance, the better the competencies are formed and the more self-confident the specialist believes himself to be. The correlation coefficient is  $r = 0.95$ . This dependence is most pronounced in relation to the desire for self-improvement and self-development (the correlation coefficient is  $r = 0.99$ ), readiness for responsible behavior and comprehension of what is happening ( $r = 0.98$ ), conflict competence ( $r = 0.97$ ).

It was not possible to identify significant dependences of the level of stress resistance on the length of service, education level, qualifications or age of the subjects in our sample.

The analysis of the data, however, showed that, in general, for the sample, the most formed is the readiness to realize independence and its components, and the least formed and successful is the experience of solving problems independently, applying knowledge and skills of self-regulation and taking responsibility in problem situations. Resistance to stress is a professionally significant quality of the subject of the educational process, on which depends not only the success of mastering pedagogical activities (self-realization as a professional), not only enhancing the productivity of training and education, but also a property (development of the teacher's wards), but also contributing to the teacher's self-realization and self-actualization as a person and a partner. The productivity of pedagogical activity is

directly related to the professional skill of the teacher, which is determined by the level of development of knowledge and skills (competencies), including knowledge and skills of stress tolerance / self-regulation (Bagadaeva, 2019; Golubchikova, 2019; Golubchikova, et al., 2020; Suyunova, et al., 2019). Among other things, representatives of the pedagogical community who positively perceive themselves, believe in their own strength and consider themselves free, independent, self-reliant, have higher self-confidence, more actively manifest their desire for active self-development and self-realization, for a flexible response to potentially stressful and crisis situations, to active strategies for coping with stress and crises, to taking a mediating position in conflicts, which increases the efficiency of their professional activities and development in general. At the same time, teachers with low self-esteem, who consider themselves dependent on others and their assessments, faced with various problems, perceive the world around them through the prism of their anxieties, often resort to an authoritarian or permissive style of response, passive coping strategies, unproductive choices of conflicting behavior, which negatively affects the efficiency and productivity of their teaching activities.

At the same time, it can be noted that the "locus" of control (internal or external) of an individual over his activities is a component of activity associated with control and correction of actions - it is not unambiguously associated with the level of stress resistance. According to the researchers, individuals who, according to the classification of J. Rotter, have an internal locus of control - "internals" (self-confident, relying only on themselves, not needing external support), are less susceptible to stress in extreme conditions and under social pressure than "Externalities" with an external "locus" of control (unsure of themselves, in need of rewards, painfully reacting to censure, relying on chance, on fate). But the "internal", not being able to look for support outside, may turn out to be even more defenseless than the "external", having lost faith in him / her under the influence of critical factors (Bagadaeva and Golubchikova, 2017). But in our study, this duality was not revealed: firstly, it was about the free self-assessment of preschool teachers, which could change the results of the research in comparison with the test results, and secondly, the concepts of "locus of control" and independence are not identical. It is obvious that "professional independence" as the ability and readiness to manage oneself and one's professional activity, proceeding from their goals and values of professional activity, is not equal to the

concept of "attributing responsibility." The first concept is much broader and, therefore, there are more factors influencing it.

## 4 CONCLUSIONS

Conceptualization of the concept of professional independence (independence or autonomy) of preschool teachers should include the following aspects: subjectivity / initiative and independence / autonomy; creative attitude and search activity, reflection and critical comprehension of reality; dialogue and feedback, responsibility / consistency (implementation) of freedom of choice; high stress resistance and experience of successfully coping with failure, experience of achievements - social efficiency and self-efficacy, experience of interaction with successful and unsuccessful colleagues and mentors; self-actualization and transcendence, the experience of raising successful children ready for the school stage.

## REFERENCES

- Arpentieva M.R., Gasanova R.R. (2020). Ability to learn and the ability to teach in the context of the development and implementation of an individual educational trajectory. *Teaching and upbringing of children and adolescents: from theory to practice*, Zebra. Ulyanovsk.
- Arpentieva M.R., Menshikov P.V. (2017). *Didactic communication: the ability to learn and the ability to teach*, KSU Kaluga.
- Bagadaeva O. Yu., Golubchikova M.G. (2017). Criteria for a teacher's stress resistance from the standpoint of an activity approach. *Pedagogical IMAGE*. No. 4 (37), pages 129-139.
- Bagadaeva, O.Yu. (2019). *Materials of the international scientific and practical conference "Information society: health, economy and law" (March 13-14, 2019)*. Network institute of additional professional education, pages 15-23.
- [https://posidpo.ru/wp-content/uploads/2019/04/Bagadaeva-O.Yu.\\_01.pdf](https://posidpo.ru/wp-content/uploads/2019/04/Bagadaeva-O.Yu._01.pdf)
- Bagadaeva, O.Yu. (2020). *Competence-based approach to the formation of stress resistance of teachers of preschool educational organizations*, Asprint, Irkutsk.
- Benson, P. (2005). *Teaching and researching autonomy in language learning*, Beijing: Foreign Language Teaching and Research Press.
- Booth, P. Guinamard I., Lloyd, E. (2017). The perceptions of a situated learning experience mediated by novice teachers' autonomy. *The EuroCALL Revue*, Vol. 25, 1, 76, pages 76-91. DOI: 10.4995/eurocall.2017.7081

- Borg, S. and Al-Busaidi, S. (2012). *Learner autonomy: English language teachers' beliefs and practices*, British Council. London.
- Brown, P. & Smith, R. & Ushioda, E. (2007). Responding to Resistance In: Barfield A., Brown S.H., eds.. *Reconstructing Autonomy in Language Education*, Palgrave Macmillan. London. DOI: 10.1057/9780230596443\_6.
- Chuk Y.-P.J. (2017). *Learning to Teach, Teaching to Learn: A Longitudinal Study of Student Teachers' Autonomous Development. Postgraduate Thesis of the dissertation in Philosophy*, Pokfulam, Hong Kong: University of Hong Kong.
- Evans, C. (2014). Exploring the use of a deep approach to learning with students in the process of learning to teach. *Learning patterns in higher education: Dimensions and research perspectives*, pages 187-213.
- Golubchikova, M.G. (2019). The problem of preparing preschool teachers for the formation of children's independence. *Problemy sovremennogo pedagogicheskogo obrazovaniya*, vol. 62(4): 55–57.
- Golubchikova, M.G., Akhmetova, A.I., Kolomiets, O.M., Arpentieva, M.R., Environmental Education and Management: Exclusiv, Inclusive, and Indigenous Doctrines. *IOP Conference Series: Earth and Environmental Science (2020)*, vol. 459, no. 052086: 1-6 DOI: 10.1088/1755-1315/459/5/052086
- Higgs, J. (1988). Planning learning experiences to promote autonomous learning. *Developing student autonomy in learning*, pages 40–58.
- Holec, H. (1981). *Autonomy in foreign language learning*, Pergamon. Oxford.
- Irie, K. and Stewart, A., eds., (2012). Realizing Autonomy: Practice and Reflection in Language Education Contexts. *Realizing Autonomy*. Palgrave Macmillan. London DOI: 10.1057/9780230358485\_1
- Kolomiets O.M. (2020). Development of educational and professional independence of a student of higher medical school in the teaching activity of a teacher. *Pedagogy: history, prospects*, Vol. 3, 3: 19-33.
- Kolomiets O.M., Golubchikova M.G. (2019). Conceptual provisions for the development of educational independence of students in the educational process. *World of science, culture, education*, 1(74): 306-308.
- Kuchah, H. & Smith, R. (2011). Pedagogy of autonomy for difficult circumstances: From practice to principles. *Innovation in Language Learning and Teaching*, 5:119-140. DOI: 10.1080/17501229.2011.577529.
- Lin, L., Reinders, H. (2019). Students' and teachers' readiness for autonomy: beliefs and practices in developing autonomy in the Chinese context. *Asia Pacific Education Review*, 20: 69–89. DOI: 10.1007/s12564-018-9564-3
- Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2): 175–182.
- McGrath I. (2000). Teacher autonomy. *Learner autonomy, teacher autonomy: Future directions*. Longman, pages 100-110.
- Moreira, M.A., Viera F. and Marques I. (1999). Pre-service teacher development through action research. *The Language Teacher*23/12: 15–36.
- Rayo, J. and Vieira, F. (2015). *Enhancing autonomy in language education*, Walter de Gruyter. Berlin.
- Ryan R.M., Deci E.L. (2018). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*, Guilford Press. New York, NY.
- Scharle A., Szabo A. (2000). *Learner Autonomy: A Guide to Developing Learner Responsibility*. Cambridge: Cambridge University Press.
- Smith, R. and Erdoğan, S. (2008). Teacher-learner autonomy: Program goals and student-teacher constructs. *Learner and teacher Autonomy: Concepts, realities, and response*, pages 83–102.
- Smith, R. (2008). Learner autonomy, *ELT Journal*, Vol. 62, Iss. 4: 395–397. DOI: 10.1093/elt/ccn038
- Smith, R. (2021). *Developing Teacher-Learner Autonomy: Constraints and Opportunities in Pre-service Training*, Warwick: University of Warwick. United Kingdom.
- Stepanova, G. A., Tashcheva, A. I., Stepanova, O. P., Kassymova, G. K., Tokar, O.V., Menshikov, P.V., Arpentieva, M.R. (2018). The problem of management and implementation of innovative models of network interaction in inclusive education of persons with disabilities. *International Journal of Education and Information*, 12: 156-162.
- Subbotin S.V. (1992). *Resistance to mental stress as a characteristic of the teacher's meta-individuality: 3pB dis. in psychol. sciences*. Perm.
- Suyunova, G., Karimova, M., Golubchikova M., Arpentieva, M., Kolomiets, O. (2019). The transformation of identity in ecological education: personal, interpersonal and professional aspects. *E3S Web of Conferences*, vol. 135, 04019: 1-6.
- Tashcheva A.I., Arpentieva M.R., Gridneva S.V. (eds.). *Foresight of education: values, models and technologies of didactic communication of the XXI century*. Altasfera Publishing and Literary Agency.
- Thavenius, C. (1999). Teacher autonomy for learner autonomy. *Learner autonomy in language learning: Defining the field and effecting change*, pages 159–163.
- Vieira, F. (1999). Pedagogy for autonomy: teacher development and pedagogical experimentation: an in-service teacher training project: Cotterall, S and Crabbe, D, Eds.. *Learner Autonomy in Language Learning: Defining the Field and Effecting Change*, pages 153–62.
- Zimmerman B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45: 166-183.