

Coping with Negative Experiences of Gifted Children due to Dis-Synchrony

Nafisa T. Burganova¹, Irina F. Sibgatullina², Leisan M. Zakirova³,
Luybov Yu. Komarova⁴

¹ Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia

Email: yfabcf@mail.ru

ORCID: <https://orcid.org/0000-0002-2746-8178>

² Yelabuga Institute, Kazan Federal University, Yelabuga, Russia

Email: office@rbs-ifie.at

ORCID: <https://orcid.org/0000-0001-5149-6139>

³ Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia

Email: drzak@mail.ru

ORCID: <https://orcid.org/0000-0003-2918-4424>

⁴ Naberezhnye Chelny Institute, Kazan Federal University, Naberezhnye Chelny, Russia

Email: luba7575@mail.ru

ORCID: <https://orcid.org/0000-0002-3759-7942>

DOI: 10.26907/esd15.3.04

Abstract

Currently, psychological support for gifted primary school children requires specialists not only to have a high level of psychological and pedagogical, but also other professional competencies for the effective correction of negative experiences.

The purpose of the article is to develop methodological techniques and organization of professional activities of psychologists using modern technologies. The leading method for studying this problem is the modelling method, which allows us to consider this problem as a purposeful and organized process for improving professional and special competencies. The structure of the article includes the target, content, organizational procedural and effective components.

Optimization of the model of differentiated approach for overcoming negative experiences in gifted children of primary school age due to dis-synchrony using the method of interdisciplinary interaction, will not only overcome negative experiences, but also prevent possible negative emotions, as well as improving the professional skills of specialists working in this field.

Keywords: adverse experiences, primary school, dis-synchrony development, gifted children, teaching and learning activities.

Преодоление негативных переживаний у одаренных детей младшего школьного возраста в аспекте феномена диссинхронии

Нафиса Т. Бурганова¹, Ирина Ф. Сибгатуллина², Лейсан М. Закирова³,
Любовь Ю. Комарова⁴

¹ *Набережночелнинский институт Казанского федерального университета,
Набережные Челны, Россия
Email: yfabcf@mail.ru
ORCID: <https://orcid.org/0000-0002-2746-8178>*

² *Елабужский институт Казанского федерального университета, Елабуга, Россия
Email: office@rbs-ifie.at
ORCID: <https://orcid.org/0000-0001-5149-6139>*

³ *Набережночелнинский институт Казанского федерального университета, Набережные
Челны, Россия
Email: drzak@mail.ru
ORCID: <https://orcid.org/0000-0003-2918-4424>*

⁴ *Набережночелнинский институт Казанского федерального университета, Набережные
Челны, Россия
Email: luba7575@mail.ru
ORCID: <https://orcid.org/0000-0002-3759-7942>*

DOI: 10.26907/esd15.3.04

Аннотация

На современном этапе психологическая поддержка одаренных младших школьников требует от специалистов высокого уровня сформированности не только психолого-педагогических, но и других профессиональных компетенций для эффективной коррекции негативных переживаний.

Цель статьи заключается в разработке (с применением современных технологий) методических приемов и организации профессиональной деятельности психологов. Ведущим в исследовании является метод моделирования, позволяющий рассмотреть данную проблему как целенаправленный и организованный процесс совершенствования профессиональных и специальных компетенций. Структура представленной работы включает в себя целевой, содержательный, организационно-процессуальный и результативный компоненты.

Использование дифференцированного подхода к одаренным детям младшего школьного возраста с феноменом диссинхронии в сочетании с методом междисциплинарного взаимодействия позволяет не только преодолевать их негативные переживания, но и предупреждать у них возможные отрицательные эмоции. Кроме того, такая модель повышает профессиональные навыки специалистов, работающих в данной области.

Ключевые слова: негативные переживания, особенности возникновения негативных переживаний у младших школьников, диссинхрония развития одаренных, учебная и внеучебная деятельность, проявления феномена диссинхронии у одаренных младших школьников

Introduction

Assimilation of the system of norms of relations to the world and to each other, is determined by the personality property of intelligence - in particular social intelligence. This allows a person to build different versions of their "picture of the world". The criteria for the level of the intellectual development of a person are related to how a person

perceives, understands and explains reality. This determines the features of intellectual mastery of the situation, and accordingly, behaviour in this situation. But this does not mean that intelligence is solely a mechanism for adapting to the environment. On the contrary, gifted people, as a rule, are maladaptive because, due to the specifics of the organization of their mental experience, they see what is happening in a different way, and their behaviour corresponds to deep, situational patterns, while coming into conflict with actual situational requirements (Burganova, 2011).

This research relates to the socialization and psycho-emotional support of gifted children of primary school age, as more and more attention is being paid to non-medical means. These psychological tools are successfully used in the correction and prevention of functional (social, communicative and psycho-social patterns of dis-synchrony). However, the use of these methods for social interaction is difficult and ineffective. They are ineffective because the paradigm of direct support of younger students does not take into account their emotional state. The phenomenon of dis-synchrony of the emotional state in gifted primary school children is manifested directly through negative experiences.

Psychological and internal dis-synchrony is the basis for the emergence of a tense and uncomfortable socio-psychological situation in the school. Thus, Sibgatullina (2020) notes that for these reasons, a gifted child's interest in learning dies. The child becomes distracted, plunges into his or her own development scenarios, shows aggression, or withdraws into him- herself.

In this paper, we report on studies of younger students with different predictors of high achievement (giftedness) in terms of the manifestation of negative experiences during academic and non-academic activities.

Purpose and objectives

To understand the pedagogical process, it was necessary to verify methodologically correctly all the main components, including an understanding of phenomenon nature of dis-synchrony and forms of educational motivation. An essential aspect of our scientific interests is the assessment of the mental development of the intellectually talented children, in terms of the presence of psychological obstacles that impede its manifestations and lead to dis-synchrony. The article explores the experience of the Institute of Psychology and Education of Kazan Federal University.

Literature review

The analysis of the literature showed that, in highlighting the possibility of overcoming negative experiences of talented children in a didactic system, researchers consider the process in a holistic context from the perspective of historicism. However, modern science approaches require constant adaptation to changing conditions (Biktagirova & Valeeva, 2015; Valeeva, R. A., & Valeeva, L. A., 2014).

In the 1990's, many scientists began actively developing specific technologies to overcome negative experiences of talented (Silverman & Kearney, 1989; Tomlinson, 1997). A number of studies note that the main trends characterizing the image of modern education is the organized process of improving the professional and special competencies of teachers in their work with talented children (Nazarova, 2001).

According to Nazarova (2001), integration is the most important means of educating children in the aspect of the phenomenon of dis-synchrony. It modifies the organizational structure of the general educational process and can be regarded as its systematizing factor as it performs the specific function of changing the learning technology (Nazarova, 2001, p. 28). Assessing the significance of this statement, it should be noted that the integration process brings its own innovations. To effectively solve the problems in training and

education of a talented primary school pupil, it is necessary to reflect these innovative technologies in the field of pedagogical practice.

The solution to this problem is in the postgraduate education of specialists. Dis-synchrony is a state of an intellectually talented child who has difficulty in contact with his environment (Zakirova, & Shulaeva, 2013). Usually, dis-synchrony reveals itself at the social and mental levels. The first level is expressed by the gap between the child and his environment – the speed of his/her intellectual development and the average (or low) rate of development of other children. Internal dis-synchrony is revealed in the inconsistency of the development of individual mental functions of the child him/herself, for example, a very fast pace of reading can be accompanied by psychomotor difficulties. Difficulties in writing or rapid intellectual development are related to a slow emotional development of the psyche (Sibgatullina, 2020).

As a rule, social and internal dis-synchrony is the basis for the emergence of a very tense and uncomfortable socio-psychological situation in school and class.

Thus, Sibgatulina (2020) notes that for these reasons, the talented child faces the lack of interest in learning, becomes absent-minded, immersed in their own developmental scenarios, shows aggression or withdraws. In general, the child remains defenceless, since teachers often do not accept such children. The child is compelled to build the whole system of psychological defences both from school, from parents and from the teacher.

It should be noted that our observations and studies have shown that there is no mandatory relationship and connection between marginal status and personality disorders of described talented children (Taber, 2007; Sibgatullina, Khamitova, Zakirova, & Komarova, 2019).

Methodology

The research employed analysis of normative documents and outcomes of activity using forecasting, systematization and generalization of facts and concepts, the study and generalization of experience, and diagnostic methods:

The experiment was conducted in the primary classes of secondary schools. A total of 248 respondents participated in the study at various stages. The sample consisted of 60 students of grades 1-3 in the schools of Naberezhnye Chelny.

The study was conducted in three stages. The first preparatory stage analysed the current state of the problem in psychological theory and practice using cross-sectional diagnostics, covering the traditional hierarchy of negative experiences in younger gifted students. At the second main stage, diagnostics of features of negative experiences in younger gifted students were applied during educational and out-of-school activities. At the third and final stage, systematization, understanding and generalization of the research results were carried out. The theoretical conclusions were clarified and the results of the study were processed and formalized.

Results

The work developed approaches for the practical activities of future specialists including:

- The target (goals, tasks),
- Methodological (approaches, principles),
- Content (features of negative experiences in gifted primary school children with different levels of cognitive abilities),
- Organizational and procedural (organizational and pedagogical conditions, scientific and methodological support) and
- Effective components (performance indicators).

- The implementation of diagnostics: gnosis, praxis, speech status, assessment of emotional state using the self-assessment test and the Spielberger-Khanin test, the method of assessing the emotional manifestations of schoolchildren by Stepanov (performed jointly with students).

- Additional components of assessing the mental state of primary school children: neurodynamic processes (Schulte's method), attitude to test performance (diligence, carelessness, passivity, indifference), the method of assessing the current psycho-emotional state of the child (determining the indicator of deviation from the auto-norm).

At the development and implementation of scientific and methodological support of practical bases stage, the pilot test was carried out for the implementation of the project for supporting children of primary school age with gifted children during academic and non-academic activities. This examined

- correspondence of texts of methods to the age characteristics of gifted primary school children;

- compliance of the diagnostic situation with the diagnostic goals.

Diagnostics were performed and 248 respondents were examined. Of these, the sample consisted of 60 students in grades 1-3 (control and experimental group: 30 people with gifts and 30 people with a high level of cognitive development). Negative experiences in the form of anxiety were shown in 98.2 % of respondents, both in the control and experimental group period of study and outside of study activities. As a result of the assessment of the overall emotional state, the following results were obtained:

- The state of General anxiety was 82% in the control group and 80% in the experimental group.

- The number of complaints about anxiety is 44% in the control group and 49% in the experimental group, respectively.

- The desire for home protection and solitude, which was also noted by almost all respondents, as well as vegetative regulation, was mainly due to sympathetic dominance. The main indicators are presented in Table 1.

Table 1. Indicators of psycho-emotional state at the beginning and end of the experiment ($M \pm m$)

Indicators	The experimental group (n=18/9:9)		The control group (n=18/9:9)	
	Before	After	Before	After
State of emotional tension (fear, anger, demonstrativeness, detachment)	53,9±3,4	53,8±4,2	53,9±3,6	54,4±4,1
A state of well-being	172,6±5,8	176,8±6,1	136,8±6,4	137,1±5,6
Mood	149,6±5,7	156,5±6,8*	173,9±6,2	184,3±7,1**
Adequate self-esteem	67,8±4,3	81,2±4,8*	68,2±4,7	90,4±5,1**

** - confidence of differences ($p < 0.01$), * - confidence

There were no significant differences in the state of the psycho-emotional profile in the control and experimental groups at the beginning of the study.

At the formative stage of the experiment, scientific and methodological support of the project was developed and implemented. This included a scientific-theoretical (leading ideas and main provisions the use of modern technology in the practice of the psychologist), content (selection and structuring of the content of psychological support of children of primary school age with talent) and methodological levels (guidelines).

The following tasks were implemented during the project:

1. Creating conditions for providing psycho-emotional support for primary school children during academic and non-academic activities:

- formation of an initiative group of student volunteers who are able to participate in the work of the creative platform;
- organization of art therapy master classes of joint creativity of children of the experimental group and volunteers with subsequent presentation of works;
- diagnostics of the communicative component of the emotional background in children involved in the project, to record the dynamics of results.

2. Creating conditions for the implementation of the accumulated potential of gifted primary school children, through their involvement in the work of the creative platform through:

- support and development of intellectual and creative abilities of primary school children;
- conducting diagnostics;
- formation of positive attitudes in order to prevent negative experiences in younger students with predictors of high achievement.

3. Accumulation and dissemination of methodological material on the possibilities and prospects of conducting a modelling method that allows us to improve the psychological and pedagogical process of supporting younger gifted students during academic and non-academic activities. Optimization of the model of differentiated approach in overcoming negative experiences in gifted children of primary school age caused by dis-synchrony using the method of interdisciplinary interaction will allow practitioners not only to overcome negative experiences but also to prevent possible negative emotions, as well as improving the professional skills of specialists working in this field:

- organization of thematic events (exhibitions of works, monthly and final exhibitions of artistic works of participants of the creative platform) that help to attract public attention to the project;
- accumulation of methodological base for the issues of supporting younger gifted students through the use of art therapy techniques;
- establishing contacts with psychological offices in the cities of the Republic of Tatarstan in order to transfer the accumulated experience and gain new knowledge.

Experimental verification of the effectiveness of the proposed content of the psychologist's work

Our research revealed the positive impact of rehabilitation measures on the process of preventing negative experiences and psycho-emotional state in younger students with giftedness within the framework of dis-synchrony.

The number of selected test tasks did not exceed the time limits for working with younger students, who usually have limited personal time (especially during the period outside academic activities).

We identified additional components for assessing the emotional state of primary school children (state of emotional tension, fear, anger, demonstrativeness, detachment; state of well-being, mood, self-esteem). The student's criterion was used to evaluate intergroup studies (at the beginning and end of the study in the control and experimental groups), and the nonparametric Friedman's criterion was used to assess the neuropsychological status.

The integral sum of the emotional state score after the project according to the above criteria was statistically significant. For the reliability of this study, we used a research scheme with assessment of neuropsychological and speech history. The study, based on

the principles of an individually differentiated approach, allowed us to assess the nature of negative experiences in younger gifted students.

Table 2. Dynamics of emotional States during the project period, the pilot group during the training period (Talented junior high school students)

Indicator (points) $M \pm m$	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	10,8 ± 1,4	10,3 ± 0,5 *	9,8 ± 0,4 **	8,9 ± 0,8***
Change of mood	16,1 ± 1,5	13,8 ± 0,4	10,1 ± 0,7*	10,8 ± 0,7**

Table 3. Dynamics of emotional States in experimental group during the period of non-academic activity (younger gifted students)

Indicator (points) $M \pm m$	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	11,8 ± 1,3	10,8 ± 0,5 *	9,8 ± 0,4 **	8,9 ± 0,8***
Change of mood	13,1 ± 1,4	12,8 ± 0,4	10,2 ± 0,7*	10,1 ± 0,7**

Negative feelings of a sensual nature prevailed in the form of manifestations of anxiety and low self-esteem, and manifestations of capriciousness.

At the stages of catamnestic (the follow-up medical history of the subject) observation before the project, there was a statistically significant increase in the number of negative experiences in younger students.

Table 4. Dynamics of negative feelings in children with high intellectual potential during the period of the training activities control group

Indicator (points) $M \pm m$	Stages of observation			
	1 at the beginning of the study	3 weeks	5 weeks	3 months
Alarm	10,3 ± 1,2	12,1 ± 0,5	11,8 ± 0,4	10,5 ± 0,8*
Change of mood	12,1 ± 1,3	11,8 ± 0,4	10,9 ± 0,7	9,8 ± 0,7*

Dynamics of emotional manifestations - by the domain of anxiety ($x_2 = 3,386$, $n = 3$, $p < 0,05$) and mood changes $X_{22} = 4,376$, $n = 3$, $p < 0,001$). When comparing the scores in the groups before the study and after the study, statistically significant differences were obtained in both the level of anxiety and mood change ($p < 0,05$).

Table 5. With high intellectual potential in the period outside of academic activities, the control group

Indicator (points) $M \pm m$	Stages of observation			
	At the beginning of the study	3 weeks	5 weeks	3 months
Alarm	11,4 ± 1,3	11,1 ± 0,5	11,1 ± 0,5	10,9 ± 0,8*
Change of mood	12,8 ± 1,4	12,3 ± 0,4	11,6 ± 0,7	9,9 ± 0,7*

A subclinical alarm was detected, and the indicator is significant. In the comparative study of ballroom scores in the study of smart, gifted school children, there is an improvement in indicators of reducing the manifestation of negative emotions and a statistically significant sharp change in mood: the level of anxiety ($r = 0,36$) and mood change ($r = 0,39$). There was no correlation between the characteristics of giftedness and the manifestation of negative experiences ($r = -0,19$).

Diagnostics and support during the project period were not limited to eliminating negative experiences and were aimed at creating optimal conditions for the psychological support of gifted children within the framework of the dis-synchrony predictor. At the same time, we believe that this problem is of particular importance in modern conditions. To date, there is no standardized and clinically tested compendium of social support for gifted children of primary school age.

As a result of the project implementation we:

- organized the final opening day of the works by gifted students in Naberezhnye Chelny, Institute of KFU created on the creative platform;
- contributed to the dissemination of information about opportunities to accompany children with disabilities;
- within the framework of the Republican events, we created conditions for exchanging views and developing progressive plans for the future in the work of psychological centres, offices and educational institutions covering up to 15 municipalities of the Republic of Tatarstan;
- created conditions for the development of intellectual and creative potential of children.

Discussions

The peculiarity of the project is that children were not given any emotional and volitional tasks aimed at transforming their own state in overcoming negative experiences. The student was only asked to participate in the project. At the same time, we believe that the modern concept of volunteer support has difficulties:

- The need to clarify the methods and techniques of support for gifted younger students. Creating a comprehensive and unified database of possible support techniques.

The creation of manuals, innovative support technologies for the purpose of prevention and regulation of negative experiences.

Thus, it is no less important to enrich the concept of dis-synchrony of mental development of gifted students and the study of motivation as a component of dis-synchrony in a sample of gifted students. This in turn confirms the possibility of describing the formula of the coefficient of dis-synchrony, which characterizes the degree of dispersion of indicators of mental development in the range of age norms (during the longitudinal study and beyond in accordance with the conditions of development).

Conclusion

The results of the research allow us to improve the clinical training of psychologists, and optimize the process of accompanying gifted children. The research established that the application of the project provides an effective means of overcoming the main components of negative experiences in gifted primary school children, as well as solving psychological, pedagogical and organizational and methodological problems, thereby ensuring efficiency. This can be useful in practical terms for specialists and psychologists in individual practice. Taking into account the results of this research, we can identify a number of scientific problems and promising areas that require further consideration. These include a more detailed expansion of some of the provisions set out above related to the formation and accumulation of psychological and pedagogical experience.

Acknowledgements

The work carried out under the Russian Government Program of Competitive Growth of Kazan Federal University.

References

- Biktagirova, G. F., & Valeeva, R. A. (2015). Formation of University Students' Readiness for Parenthood. *Review of European Studies*, 7(4), 93-97.
- Burganova, N. T. (2011). *Modern pedagogical approaches in education (article)*. *Education and science of the Zakamya region of Tatarstan*. Retrieved from <http://nauctat.ru>
- Nazarova, L. P. (2001). Integration of children with disabilities in the secondary school. *Scientific Notes*, 48, 1-15.
- Sibgatullina, I. F., Khamitova, L. M., Zakirova L. M., & Komarova, L. K. (2019, May). Study of academic motivation of gifted students in the context of the phenomenon of dis-synchrony. In *2019 International Conference on Pedagogy, Communication and Sociology (ICPCS 2019)*. Atlantis Press.
- Sibgatullina, I. F. (2020). Informal education and benchmarking in the learning cities system. Visual Anthropology. City-University: Living Space and Visual Environment. In *Proceedings of the III International Scientific Conference*. Veliky Novgorod: Yaroslav-the-Wise Novgorod State University Press.
- Silverman, L. K., & Kearney, K. (1989). Parents of the extraordinarily gifted. *Advanced development*, 1(1), 41-56.
- Taber, K. S. (2007). *Science education for gifted learners*. London: Routledge.
- Tomlinson, C. A. (1997). The dos and don'ts of instruction: What it means to teach gifted learners well. *Instructional Leader*, 10(3), 1-3.
- Valeeva, R. A., & Valeeva, L. A. (2014). Rights of the child in the adult world in the context of the ideas of Janusz Korczak and John Dewey. *Education and self-development*, 4(42), 60-62.
- Zakirova, L. M., & Shulaeva, M. V. (2013). *Psychological conditions of creative development of the personality: Monograph*. Nizhnekamsk: LLC printing house Guzel.