

## Do Resilient Schools Exist? Chances for Quality Education for Children from Dysfunctional Families

Vladislav Vinogradov<sup>1</sup>, Olga Shatunova<sup>2</sup> & Shamil Sheymardanov<sup>3</sup>

### Abstract

The purpose of this work is to develop models of resilient schools, both positive and negative. This study is based on the methodological principles of interdisciplinarity and consistency. The process of identifying models of resilient schools took place in two stages: 1) searching databases for examples confirming the existence of “successful” schools in difficult socio-economic conditions, and 2) analysis of interviews and survey results of teachers, students, and parents. Results show that the proposed classification of models of resilient schools was clarified. The remaining uncertainty regarding the issue of the existence of resilient schools is resolved through the inclusion into the sphere of pedagogical analysis of non-social objects such as actors of educational interaction. It is shown that adverse social conditions (from the standpoint of the school and universal values) in reality seem to be the most likely life futurity for children from dysfunctional families. Changing this futurity to a more positive one requires a specific education in a resilient school, which differs from other schools in its educational strategy. The paper defines the school strategies determining qualitatively different models of resilient educational organizations. Five such models are proposed, based on the principles of resonant interaction oriented to supporting positive and blocking negative educational fluctuations of schoolchildren, compensatory interactions, calling for the creation in the school of specific conditions neutralizing the effects of the adverse environment, development of personal resilience of pupils as a meta-competency, and integration of all previous models into a single educational system. The integrative model can be considered as the highest level of school resilience, achieved by the gradual development of the previous models.

**Key words:** *education, dysfunctional family, individual resilience, school resilience.*

### Introduction

Families in which conflicts, destructive behavior by one or both parents, and neglect of children are the norms of their existence are most often classified as dysfunctional (Masteller & Stoop, 1991). Often this kind of behavior is inherited; parents learned it from their parents and, most likely, will pass it on to their children, thus forming a kind of vicious circle that is difficult for a

<sup>1</sup> Assoc. Prof., Yelabuga Institute, Kazan Federal University, email: vinogradov.ksu@yandex.ru

<sup>2</sup> Assoc. Prof., Yelabuga Institute, Kazan Federal University, email: olgashat67@mail.ru

<sup>3</sup> Assoc. Prof., Institute of Pedagogy and Psychology, Kazan Federal University, email: pedagogshamil@mail.ru

child to break. However, if the child manages to do this and, despite a difficult situation, achieves serious successes, they are called resilient.

The concept of resilience, being fairly new to the humanities, is now more often used to characterize the individual characteristics of a person. In a child, resilience can be developed by increasing their resistance to the negative influence of the environment. However, this requires special, goal-oriented efforts by teachers and psychologists. Otherwise, individual resilience remains an important but single manifestation of a child's ability to succeed despite everything. Do children from dysfunctional families who are not individually resilient have chances to get a quality education and improve their life prospects? There is every reason for a positive answer to the question.

First of all, the experience of the development of individual resilience is important, proving that this is not an innate but a formed quality of a person. On the other hand, cases are known of the existence of educational organizations functioning in difficult social conditions and nevertheless achieving high educational results. Such schools are also called resilient. Thus, one assumes that if a resilient school, characterized by the ability to create special conditions that ensure high-quality education for children from dysfunctional families (including those with a low level of individual resilience), appears in a microdistrict with a large share of dysfunctional families, the problem will be solved.

The problem is that studies in the field of school resilience have not been able to capture common strategies characteristic of educational organizations that show effectiveness in difficult conditions. This means the possibility of the existence of various models of school resilience. Their identification and general characterization is the goal of the present study.

### **Research Questions**

Achieving this goal determines the need to answer the following research questions:

1. What is the difference between a resilient school and a regular school, in order to provide chances for quality education for children from dysfunctional families?
2. What particular models of resilient schools provide chances for quality education for children from dysfunctional families?

## **Literature Review**

The humanities have borrowed the concept of resilience from physics, where it means the ability of an object to restore its state after the cessation of external influence, its stability and elasticity. Having no initial evaluative meaning in relation to a person, resilience acquired an unambiguous positive meaning as a “quality that allows some people to be knocked down by life and come back stronger than ever. Rather than letting failure overcome them and drain their resolve, they find a way to rise from the ashes” (<https://positivepsychology.com/what-is-resilience/>). The stability characterizing the opposite ability of a certain category of people to continue an asocial lifestyle despite all the attempts of the environment to help them is virtually not considered. Without trying to change the established understanding of psychological (social, academic, etc.) resilience, it is nevertheless necessary to have in mind this phenomenon as having a similar nature, but differing by the opposite directionality (Saenko et al., 2019; Movchan et al., 2021).

## **Individual Resilience**

In Russian education, as a precursor of the problem of individual resilience, one can consider the work on preventing and overcoming school failure. The term “school unsuccessfulness” was more often used in the meaning of “school failure” and, in the opinion of Russian researchers, meant the phenomenon of pupils systematically lagging behind their peers in mastering the school curriculum, leading to negative consequences in behavior: persistent unwillingness to learn, violations of school discipline, skipping classes or refusing to attend school (Isaev et al., 2019). The reasons for this behavior are often sought in the psychophysiological and psychological characteristics of low-performing students and in the insufficient pedagogical competence of teachers and parents.

In the European psychological-pedagogical tradition, the main reason for school unsuccessfulness is seen in socio-economic factors. For example, the correlation between the academic success of students, the socio-economic characteristics of families, and social well-being is considered obvious (Bourdieu, 1986; Pronk et al., 2020). The development of studying the causes of school unsuccessfulness, taking into account the socio-economic characteristics of families in assessing the educational achievements of pupils, allowed for identifying the phenomenon of academic resilience, understood as the ability of students to demonstrate high results despite external limiting circumstances (Isaev et al., 2019; Medvedeva and Mitina, 2021).

In a general sense, individual resilience is a person's resistance to change, manifested in critical circumstances (Luthar et al., 2006; Rutter, 1990; Werner, 1990), a synonym for a high level of self-regulation, manifested regardless of life circumstances. Scientific research on individual resilience began in the second half of the 20th century. Studies show that resilience is not an innate characteristic (Luthar et al., 2000) but an acquired quality associated with the individual characteristics of a person, providing them with flexibility and stability in situations of risk, stress, and crisis, contributing to the rapid normalization of the state, on the one hand, and, on the other hand, ensuring further effective development (Grotberg, 2003; Masten et al., 1990).

In contrast to the medical model of resilience, which puts emphasis on the factors causing the problem, educational researchers focused on factors including mechanisms of "strength," "defense," and "sense of security." A new research model aimed at studying the conditions for success was later called the resilience model (Masten & Powell, 2003). The psychiatrist Norman Garmezy (1918-2009) is considered the founder of the theory of resilience; he led a group of researchers to study adolescents growing up in difficult life circumstances who nevertheless managing to cope with them, achieve developmental success, and successfully integrate into society (Masten & Obradovic, 2006). Emmy Werner first used the term "resilience" in social science literature (Luthar et al., 2000).

### **Resilience of the Pupil**

Studies in the field of children's resilience have revealed the key protective psychosocial factors that promote stability (Cove, 2005; Masten & Obradovic, 2006; Polat, 2020), which fall into three groups:

1. personal qualities of children and adolescents (good intellectual abilities, non-confrontational temperament, good social skills, problem-solving strategies, self-confidence, positive self-esteem, interests (hobbies), spirituality);
2. characteristics of families (relations within the family, the level of education of parents, the financial situation of the family);
3. characteristics of the environment (connections outside the family, interaction with associations and organizations, access to education at various levels (from preschool to university), the attractiveness of lifelong education, opportunities for quality leisure time, intergenerational cooperation, and other environmental influences).

The work of Michael Rutter (1990) played a significant role in the research of pupil resilience, identifying four key mechanisms of protecting a child from negative influences by means of minimizing damage from adverse conditions, increasing self-esteem and self-efficacy, developing and strengthening competencies for successful problem solving, and events promoting the full development of personality. All these mechanisms ultimately determine various models of school resilience, which will be discussed below. Here it is important to note that studies of pupil resilience naturally led to the question of its purposeful formation in the context of school education.

Thus, for example, Muravyova and Oleinikova (2017), citing the typology of key competencies adopted in the European Union, note that in recent times, endurance and resilience, vision, self-regulation, and empathy, which are, in fact, meta-competencies, have often been added to these competencies: “Among the additional meta-competencies indicated above, the central place is occupied by resilience, understood as the ability to ‘take the blow’ in the case of failures.” In their opinion, it is the school that plays a key role in the future success of children from dysfunctional families, if it actively forms resilience and if the teachers there serve as positive behavior models.

### **Resilience of the Teacher**

Some researchers in the field of teacher resilience state that it can only manifest itself in times of hardship (Doney, 2013). On the other hand, most analysts note that teaching requires “daily stability” (Gu & Day, 2013; Gu & Li, 2013) to deal with uncertainty as well as various intellectual and emotional problems. Daily stability involves more than just overcoming difficulties but rather the ability to cope with current problems while continuing to grow and prosper professionally. Empirical studies have revealed the professional, motivational, social, and emotional aspects of teacher resilience (Mansfield et al., 2012; van Kessel, 2020).

Personal resources that enhance teacher resilience include intrinsic motivation (Kitching et al., 2009) and self-efficacy (Howard & Johnson, 2004; Le Cornu, 2009), the presence of a personal moral goal (Day, 2014), feelings of vocation (Hong, 2012), optimism (Tait, 2008), and social and emotional competency (Ee & Chang, 2010). Resources of the environment can be used to support the stability of teachers; thus, in the literature, the key resource is relationships within and outside the organization. For example, relationships between teachers and school leaders (Peters & Pearce, 2012), with trusted colleagues (O’Sullivan, 2006), with all school communities (Ebersöhn, 2012),

with supporters outside the school or on the Internet (Papatraianou & Le Cornu, 2014), and between teachers and their pupils (Morgan et al., 2010) reinforce teacher resilience.

It is also indicated in the literature that teachers can use different strategies of personal and environmental resources such as problem solving (Johnson et al., 2014), seeking help (Sharplin et al., 2011), and setting goals and strategies for balancing work and personal life (Le Cornu, 2013). Continuous professional training also has a number of positive results (Patterson et al., 2004), as well as other activities connected with reflection (Leroux & Théorêt, 2014). Using good communication skills is also an important strategy (Schelvis et al., 2014), as well as the ability to regulate emotions (Morgan, 2011).

### **Resilience of Schools**

While the concept of resilience as a person's ability to overcome life difficulties with dignity has been firmly established in modern research, it is used with reserve in relation to educational organizations. An exception is a series of papers devoted to schools capable of achieving high educational results while working in difficult social conditions (Lupton, 2004; Pinskaya et al., 2011, 2018; Timberlake, 2020).

In all cases described, the performance criteria are common to all schools, regardless of the social context of their activities. This is a comparison of the proportion of pupils enrolled in high school and trained in middle school (Balganova, 2021; Borman et al., 2003; Pinskaya et al., 2018), high positions in the ranking according to testing results (first of all, in mathematics), and results of participation in Olympiads and competitions (Pinskaya et al., 2011). Among the factors ensuring the high performance of resilient schools are a high level of teacher qualifications (Derbyshire & Pinskaya, 2016; Panova et al., 2020), close interaction between the school and the parents of pupils, the use of effective teaching methods (Liu et al., 2019), positive school climate, and high expectations regarding the achievements of schoolchildren on the part of the school, parents, and the pupils themselves (Pinskaya et al., 2018), a high level of education of parents, family income (Pinskaya et al., 2012), the motivation of leaders, teachers, and students (Kuznetsov et al., 2018), and the exchange of experience with colleagues during face-to-face meetings (Bysik et al., 2018), among others.

At the same time, all these factors are not directly related to school resilience but are encyclopedic conditions for the effectiveness of the educational process in general, regardless of the context in which this process takes place, and these conditions are formulated in almost all publications on general issues related to the organization of educational activity (Ushakov, 2017). It is no coincidence that some scholars of school resilience have to admit that “causal relationships between the educational results of the school and individual managerial strategies cannot be established” (Derbyshire & Pinskaya, 2016).

A logical question arises: Is it enough for a school working in difficult social conditions to have high rating indicators to be called resilient? Considering that these rating indicators can be provided by administrative and not pedagogical factors, the answer to this question is not definitively positive. Indeed, a number of studies show that the so-called resilient schools are trying to attract the most promising pupils to senior classes, and the pupils with academic problems are recommended to continue their education in the secondary vocational education system. As a result, the authors of the studies note that they cannot “judge to what extent the high achievements of students from dysfunctional families are due to the influence of the school, and to what extent they can be determined by their individual characteristics” (Pinskaya et al., 2018). So, do resilient schools exist?

## **Method**

### **Research Design**

This study used a descriptive research design and qualitative approach. The descriptive design refers to content analysis as suggested by Zhang and Wildemuth (2009) and qualitative analysis from Creswell (2014). The aims are to describe phenomena of school resilience in Russia. Data were analyzed using thematic analysis based on content analysis by Zhang and Wildemuth (2009).

### **Data and Sources**

The most actively used resources of this study are [positivepsychology.com](http://positivepsychology.com), [theadvocate.org](http://theadvocate.org), [thoughtco.com](http://thoughtco.com), [psyjournals.ru](http://psyjournals.ru), [britannica.com](http://britannica.com), [educationcorner.com](http://educationcorner.com), [iq.hse.ru](http://iq.hse.ru), [medium.com](http://medium.com), [mel.fm](http://mel.fm), [oecd-ilibrary.org](http://oecd-ilibrary.org), and [education.com](http://education.com) (see Table 1).

**Table 1***Table data and data sources*

| #  | Source                 | Data  |
|----|------------------------|---|
| 1  | positivepsychology.com | A definition of resilience; most common ways of resilience development  |
| 2  | theadvocate.org        | Main elements needed to build motivation and resilience in students   |
| 3  | thoughtco.com          | Techniques for personal resilience development  |
| 4  | psyjournals.ru         | Features of resilience in students and families   |
| 5  | britannica.com         | A definition of resilience and its types  |
| 6  | educationcorner.com    | Social-Emotional Learning   |
| 7  | Iq.hse.ru              | The phenomenon of resilient schools in the context of Moscow  |
| 8  | medium.com             | The family context of schoolchildren's resilience   |
| 9  | mel.fm                 | Ways of increasing the psychological stability and resilience of students                                     |
| 10 | oecd-ilibrary.org      | The resilience of students with an immigrant background; resilience-building in practice; academic resilience |
| 11 | education.com          | Lesson plans; tools for resilience; nurturing children's resilience   |

The criteria for inclusion/exclusion of the proposed information in the research base in conceptual terms were its internal and external consistency (the logical consistency of information in the article itself and its consistency with other similar articles). In addition, the following were taken into account: 1) the correctness of the presentation of information; 2) completeness of coverage of the issue or its part; 3) the need for information to decide on an issue important to the study; and 4) the validity of information (links to confirming sources, the credibility of the source of information, laconicism and provability of information).

**Data Collection**

Data of this study includes text-based information from the authors collected based on the themes and unit analysis identified in the documents. The authors used two stages of data collection. This made it possible to, first, reasonably answer the question of the existence or lack of resilient schools as a pedagogical phenomenon, and, second, to determine the necessary grounds for building possible models of school resilience based on incomplete quantitative research data.

At the first stage, through the prism of the indicated theories, the authors carried out the analysis of statistical information on various aspects of resilience provided by Scopus, Web of Science, and other databases for the period of 1979-2019, as well as the articles registered there. The objects of analysis were examples confirming the existence of “successful” schools in difficult socio-

economic conditions. Educational organizations called “a school that functions well in a context of adversity” (Masten et al., 2008) and “schools performing beyond expectations” (Hargreaves & Harris, 2011) were studied.

At the second stage, the authors determined the list and main characteristics of models of resilient schools. A comparative analysis and structuring and modeling of the characteristics of resilient schools described in the scientific literature were carried out, and the hypothesis put forward in the study about the existence of negative school resilience as the ability of an educational organization to show persistently negative educational outcomes, despite the effects of the environment, was substantiated.

In addition to analyzing special literature, both stages involved a content analysis of information presented on the Internet, for which keywords and phrases were used such as «educational effectiveness research», «school effectiveness research», «schools performing beyond expectations», «resilience of the individuals», and «resilience of the schools».

### **Data Analysis**

This study applied content analysis to analyze data referring to stages proposed by Zhang and Wildemuth (2009) and procedures of qualitative data analysis by Creswell (2014). The authors adapted five stages of data analysis from those experts. First, data in terms of numbers and texts were converted into narrative data; in this way, the authors collected all data and identified both statistical data and narrative text for the data base. Based on the data base, the authors categorized the data into themes. Second, the authors selected units of analysis and themes from the data base relevant to the research questions. Third, the authors developed a system of data coding to identify each unit of analysis. Fourth, the authors applied the coding system to have the number of each data provided with the unit of analysis to all available data in the data base; in the case of incorrect numbering, the coding and unit analysis were corrected. Sixth, the authors verified all coding data and determined the final data for the evidence of this study.

## **Results and Discussion**

### **Difference Between a Resilient School and a Regular School**

A high-ranking position of a school operating in difficult social conditions is only one of the markers of its resilience and, moreover, the most superficial one. If resilient schools really exist, they should have some specific differences from educational organizations that simply

successfully use the achievements of general pedagogy. However, before attempting to search for these differences, it is necessary to make a small methodological digression, and before attempting to conduct a qualitative analysis of research information in order to search for these differences, it is necessary to determine its methodology, which acts as a kind of information filter and the basis for systematizing the available data.

### ***Subjects and objects of education***

Justification of school resilience as an educational phenomenon of the 21st century cannot be carried out effectively on the basis of the methodology of classical pedagogy. The problems are primarily caused by the gradual disappearance from the pedagogical interaction of the pupil as an object, changing under the influence of the teacher as a subject. The initially humanistic and not always recognized idea of a “pupil as an independent subject of education” is turning today into the reality of total self-education that threatens the very existence of educational organizations. If the student is the subject of education, then who (or what) is the object? Taking into account that the result (matter) of education in the modern world is competence, which, by definition, has an activity-related nature, its object is the world around a person in all its diversity. Also, an element of the pedagogical process is the learner’s interaction with some side of the universe, causing a change in the interacting parties and manifesting itself in the form of added competence. Thus, an unprecedented transformation of education takes place, causing the necessity to re-establish connections and reassemble pedagogical reality, like Bruno Latour’s “reassembly of the social.” Obviously, pedagogical reality, growing beyond the limits of the social in its classical sense, includes not only a person but also all other objects, including those previously designated by the concepts of “environment,” “context,” etc. A conspicuous example is the COVID-19 virus, which very quickly and more effectively than all teachers and education leaders combined taught how to wash hands, observe hygiene, maintain physical activity in any conditions, and, importantly, how to make maximum use of digital technologies for educational purposes.

To begin with, let us eliminate the artificial and destructive separation of school and the contexts in which it operates, as in family AND school, school AND manufacturing, school AND law, school AND the coronavirus, etc. The conjunction “and” initially implies opposition, while education requires integration, interpenetration, and mutual responsibility (from the word “response”).

Indeed, if an element of the pedagogical process is the interaction of the student with various aspects of the universe, then, for example, by ignoring the rules of hygiene and prevention in relation to COVID-19, one can get an answer from the virus that corrects one's behavior. The same applies to other elements of interaction. A distinctive feature of education from life itself is the possibility and necessity of managing this interaction, replacing part of the real conditions of interaction with quasi-conditions and increased requirements for the awareness of interaction processes and their results.

### ***Complexity of social conditions***

Returning to the problem of resilience, let us once again clarify what the “complex social conditions” of the functioning of the educational organization are and what their negative impact on the effectiveness of education is. However, this will be done not from the standpoint of their opposition to school but taking into account their integration into the educational process.

In various kinds of research, one can find indications of the following aspects of the life activity of schoolchildren, with a high probability of having a negative impact on their education:

1. Deprivation of the family, causing a whole range of interaction risks, including aggression as an acceptable style of behavior, the priority of life support issues in relation to education, the assertion of the asociality of behavior as a norm, a simplified language of communication, etc.
2. Economic infringement, which often determines the inferiority of prospects and growth opportunities, due to the inherited low social status of the family, miserable (or perceived as such) existence in adverse conditions.
3. Sociocultural sameness of the environment (low availability of sociocultural objects), which confirms the orientation toward the use of often primitive forms of leisure and escape from reality into the narcotic world of illusions, etc.

In addition, further problems can be created for the school by students who, for objective reasons, find themselves in a risk zone (children from migrant families, children left without parental care, etc.), the presence of potentially dangerous objects in the structure of the microdistrict (neuropsychiatric boarding school, industrial or construction objects, objects of the Department of Corrections), etc.

In other words, the difficulties are caused either by the peculiarities of the student body or the risks of the environment. Neither requires proof, forcing one to once again state the banal truth that “for schools with a low level of social well-being, the probability of demonstrating low results is much higher than for socially trouble-free schools” (Pinskaya et al., 2018, p. 35). That is, in a situation where schools are not fundamentally different from each other, their effectiveness depends on the conditions in which they find themselves by the will of fate.

The interaction risks briefly outlined above are conditions for the effective survival of children in the environment “with a low level of social well-being.” Accordingly, these conditions themselves, which serve as actors of pedagogical interaction, ensure the formation of students’ competencies that are adequate to the interaction situation. As a result, children become well-adapted to aggressive behavior, prefer casual part-time work to studying, are scornful of social norms, cheerfully spend time “behind the garages,” completely inherit the social image of their ancestors, and do not correspond to the noble ideas about the ideal school graduate.

What is the problem? Does it lay in the adaptability of schoolchildren to existing conditions? Certainly not! The problem is in limiting the freedom of choice of life path for today’s schoolchildren, in imposing on them the existing way of life as the only possible way. The outlined critical situation can be changed either by introducing fundamentally new actors into the educational process, expanding the capabilities of schoolchildren, or by developing their individuality and the most pronounced abilities to the full extent. This is what should be taken into account when establishing strategies of resilient educational organizations.

Thus, the existence of resilient schools, as well as the need for further analysis of the reasons for their effectiveness, is confirmed by multiple studies of resilience. The main distinguishing feature of resilient schools is their ability to provide their graduates with a multiplicity and independence of choices for future life paths.

From the standpoint of the proposed methodology, resilience is manifested in one of two directions that determine a school educational strategy, or in their combination:

1. Active and thoughtful introduction into the educational process of a complex of actors that correct the emerging competencies of schoolchildren.
2. Maximum use of personality-oriented education technologies in the educational process, contributing to a development of the most pronounced abilities of schoolchildren and acting in the future as a kind of crystallization center for graduates’ life strategies.

The findings suggest several models of resilient schools, which differ in special educational strategies that ensure a high level of academic achievement of students from disadvantaged families and distinguish them from simply effective schools operating in standard conditions (Galkiene & Puskorienė, 2020; More & Rodgers, 2020).

## **Models of Resilient Schools**

### ***Model One: “Continuity”***

This is based on postulating the value of social continuity. The implementation of the model presupposes a conscious and competently realized aspiration of the school to ensure the reproduction of the human resource based on the gradual sustainable development of positive human qualities accumulated by the family over many generations. In the context of the problem under consideration, it concerns primarily working professions, respect for working dynasties and the laboring man. The school, in this case, does not ensure the academic success of pupils, although it does not exclude it. For example, one of the surveyed schools with traditionally low rating indicators over the past few decades has had among its graduates a hero of Russia who saved many civilians at the cost of his life, an academician, a rector of one of the largest universities in the country, a professor, a director of the institute, and a number of successful merchants, although for the most part school graduates have mastered working professions, having inherited them from their parents. Many highly rated educational organizations cannot boast of such results (Palmer & Witanapatirana, 2020).

What distinguishes schools of this type from others functioning in similar conditions? The school works based on the principle of resonant interaction, trying to discern and support the most diverse talents of its educatees. Let us clarify again: It does not form these talents but supports them, flexibly reacting to the dynamics of schoolchildren. It does not struggle with the “negative context” but tries to make friends with it, realizing that any quality of the pupil is capable, depending on the situation, of manifesting itself as both negative and positive. This position of the school gives it the opportunity to largely neutralize the negative manifestations of pupils, using a positive moral-psychological climate and a careful attitude toward each other. The school understands and accepts its low academic rating because, as Lucius Seneca stated, “Where you cannot do anything, you should not want anything.” At the same time, low ratings of such schools are more likely a problem of the ratings rather than the schools themselves.

***Model Two: “Against all odds”***

This is based on the principle of compensatory interaction. Unlike the above type of schools, in this case there is active opposition of the school to the negative influences on students of a whole complex of basic interactions (actors). For example, “teaching children with a dysfunctional family status, the school assumes the functions of family supervision and care, solving protective and educational tasks” (Pinskaya et al., 2011, p. 168). In some cases, this prevents the school from focusing on educational goals: “Oftentimes the school considers such a strategy as its special mission and, when discussing the quality of education, refers to it as an excuse for low educational achievements” (p. 168). On the other hand, the latter is not absolutely necessary and is not a feature of resilient schools of this type. Compensating for the adverse influence of the family environment on preparing pupils for classes, the conditions for this are created in the school. Teachers find an opportunity to work with children additionally, extended-day groups or something similar to such groups are opened, but in a different form (Bysik et al., 2018). The sociocultural component of education is also changing due to the targeted involvement of regional cultural objects in the educational process, the integration of the school with the system of additional education of children.

In other words, the school seeks to replace elements of interaction that have a destructive effect on students, creating special conditions for this and causing the emergence of new actors of pedagogical interaction. Aggression is opposed by benevolence, momentary priorities by the prospects of growth and faith in the ability of pupils, and economic constraints by the ability to live in dignity in any conditions. As a result, the very structure of interaction changes and, naturally, its final result does as well.

***Model Three: “Become stronger”***

Regardless of the context in which the school operates, it is distinguished by the goal-oriented formation of resilience among students as a meta-competency, which involves:

- the ability to “ward off” negative factors, to “bounce” from them;
- the ability to control emotions;
- understanding of one’s own strengths and advantages;
- reliance on emotional involvement;
- inventiveness;

- a sense of one's own potential/ personal agency;
- the ability to interact with others;
- the ability to solve problems (Muravyova & Oleinikova, 2017, p. 17)

For schools operating in difficult social conditions, the emphasis on “resilience as the ability to adequately meet and overcome adverse circumstances and challenges, while becoming stronger” (p. 17) is especially important. No school is able to completely replace the whole variety of educational influences or completely eliminate destructive ones, nor should it, for to adequately come out of adverse situations can contribute to the formation of students' ability.

Given that educational organizations work in accordance with existing standards, it should be noted that the integration of resilience into the target set, which describes educational results achieved by the school, does not contradict the standards but systematizes their implementation. The above “skills” of resilience include a whole complex of personal and meta-subject educational results. Thus, developing pupils' resilience, the school automatically forms many other important qualities in them due to the synergetic effect of resilience.

#### ***Model Four: “Together into the future”***

This is hybrid in content and refers to the educational organizations that use in their activities the elements of all the models outlined above. Essentially, it characterizes the highest level of development of a resilient school, while all previous models in this case can be considered as sublevels. Indeed, it is logical to start the school's movement from a state of low resilience to the highest possible one by creating in the educational organization a system of a flexible response to the achievements and anomalies of pupils, gradually moving to creating a system of compensating for educational deficits and, further, to integrating individual (personal) resilience into the target set of education results as a core element (Korableva et al., 2020).

The indicated logic of the development of school resilience has one limitation: It cannot be used in relation to schools with persistently low educational results, while assuming the necessity of some “zero” state of the educational organization. The latter requires the identification of another model of school resilience.

***Model Five: “Convinced poorness”***

This characterizes schools working in difficult social conditions, showing consistently low educational results and accepting this state as inevitable. To a large extent, the school has every reason for this, except morally and ethically. The school traditionally occupies the lowest ranking positions in the municipal education system, which leads to a predominantly depressive state of its administration, staffing on the basis of “negative selection,” the prevalence of negative motivation for teachers and, further, for pupils who, in turn, do not have high academic ambitions.

Such a school is also resilient in the original physical understanding of resilience. Any efforts to manage education there have a temporary, waning effect, after which the school returns to its original state. Moreover, these efforts are also traditional, including replacement of leadership, requirements to provide a program for overcoming the crisis, strengthening methodological control, etc. While these measures can yield a positive effect for the average school, they do not lead to the expected result in the negatively resilient school.

The moral and psychological grounds for overcoming the negative resilience of the educational organization in the system of traditional school management are generally ineffective and come down to the translation of common truths about professional duty, responsibility, and patriotism, which in the conditions of negative resilience is perceived more as humiliation than a guideline for action. Nevertheless, it is with the moral and psychological climate that the hopes for the school’s coming out from an impasse are associated. All other problems are solvable. This is indicated by the experience of multiple studies of schools working in difficult social conditions but, nevertheless, achieving high educational results.

**Conclusion**

To answer the question about the existence of resilient schools means to identify their essential differences from other non-resilient educational organizations. However, it is incorrect to focus solely on their ability to achieve high rating positions while working in difficult social conditions. This is an indirect indicator of resilience, which can be falsified and is therefore insufficient. Anything that has a rating value and can be falsified *will* be falsified, driving the school into an even deeper crisis. At the same time, researchers’ attempts to identify more serious distinctive features of resilient schools, based on the peculiarities of managerial strategies, were unsuccessful. The authors have closed this gap by changing the emphasis from the ranking positions of a school

to the ability to provide its graduates with worthy choices of life paths. Obviously, students' high academic achievements expand the range of opportunities for graduates, but this is not an exceptional condition for their effective self-fulfillment.

Expanding the scope of analysis, the authors introduced the inclusion in the pedagogical process of the interaction of pupils with various aspects of the universe (in particular, non-social ones) as its equal participants. The authors identified five main models of resilient schools. Consideration of education in this light allowed for interpreting the expected educational result as a change/development of students in the process of interaction with a variety of actors. Accordingly, the quality of this result will depend on either the variety of interaction or its depth. Both ways determine the increase in the volume of acquired educational information in its broad sense (the attributive concept of information). Among them are three basic models of positive resilience ("Continuity," "Against all odds," "Become stronger"), one model of negative resilience ("Convinced poorness") and a hybrid model ("Together into the future") that combines the attributes of all three models of positive resilience and represents a possible final result of the development of school resilience. The proposed models allow for taking a fresh look at the results of studies in the field of individual and collegial (school) resilience, the results of studies of school effectiveness in general, and also use these results in designing the development of educational organizations in the direction of increasing their resistance to negative fluctuations in the context of their professional activity.

### **Acknowledgments**

This paper has been supported by the Kazan Federal University Strategic Academic Leadership Program.

### **References**

- Borman, G. D., Hewes, G. M., Overman, L. T., & Brown, S. (2003). Comprehensive school reform and achievement: A meta-analysis. *Review of Educational Research*, 73(2), 125-230. <https://doi.org/10.3102/00346543073002125>
- Bourdieu, P. (1986). The forms of capital. In *Handbook of theory and research for the sociology of education* (pp. 241-258).

<http://www.socialcapitalgateway.org/sites/socialcapitalgateway.org/files/data/paper/2016/10/18/rbasicsbourdieu1986-theformsofcapital.pdf>

- Balganova, E. (2021). Digitalization Trends and Risks Professional Education. *Russian Journal of Education and Psychology*, 12(3), 19-31. <https://doi.org/10.12731/2658-4034-2021-12-3-19-31>
- Bysik, N. V., Kosaretsky, S. G., & Pinskaya, M. A. (2018). Designing a model for the professional development of school teachers operating in adverse social conditions working with students at the risk of educational failure: An empirical basis and key components. *Psychological Science and Education*, 23(5), 87-101. doi: 10.17759 / pse.2018230509
- Cove, E., Eiseman, M., & Popkin, S. J. (2005). *Resilient children: Literature review and evidence from the HOPE VI Panel Study. Final Report*. The Urban Institute Metropolitan Housing and Communities Policy Center Street, NW, Washington, DC. [http://www.urban.org/UploadedPDF/411255\\_resilient\\_children.pdf](http://www.urban.org/UploadedPDF/411255_resilient_children.pdf)
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage
- Davydov, V. V. (1996). *Theory of developing learning*. Moscow: INTOR Publ.
- Day, C. (2014). Resilient principals in challenging schools: The courage and costs of conviction. *Teachers and Teaching: Theory and Practice*, 20(5), 638-654.
- Derbyshire, N. S., & Pinskaya, M. A. (2016). Management strategies of directors of effective schools. *Educational Issues*, 3(1), 110-129.
- Dewey, J. (1938/2007). *Experience and education*. Simon & Schuster.
- Doney, P. A. (2013). Fostering resilience: A necessary skill for teacher retention. *Journal of Science Teacher Education*, 24(4), 645-664. doi:10.1007/s10972-012-9324-x
- Ebersöhn, L. (2012). Adding 'flock' to 'fight and flight': A honeycomb of resilience where supply of relationships meets demand for support. *Journal of Psychology in Africa*, 27(1), 29-42.
- Ee, J., & Chang, A. (2010). How resilient are our graduate trainee teachers in Singapore? *The Asia-Pacific Education Researcher*, 19(2), 321-331.
- Fantilli, R. D., & McDougall, D. E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching & Teacher Education*, 25(6), 814-825. doi:0.1016/j.tate.2009.02.021
- Fuller, R. B. (1979). *Buckminster Fuller on education*. University of Massachusetts Press.

- Fuller, R. B., & Applewhite, E. J. (1975). *Synergetics: Explorations in the geometry of thinking*. Macmillan Publishing Co., Inc.
- Galkiene, A., & Puskoriene, G. (2020). Development of adaptation tools for pupils on the autism spectrum in microsystems. *Research in Social Sciences and Technology*, 5(2), 1-21. <https://doi.org/10.46303/ressat.05.02.1>
- Gu, Q., & Day, C. (2013). Challenges to teacher resilience: Conditions count. *British Educational Research Journal*, 39(1), 22-44. doi:10.1080/01411926.2011.623152
- Gu, Q., & Li, Q. (2013). Sustaining resilience in times of change: Stories from Chinese teachers. *Asia-Pacific Journal of Teacher Education*, 41(3), 288-303. doi:10.1080/1359866X.2013.809056
- Haken, H. (1982). *Synergetik*. Springer-Verlag.
- Hargreaves A., & Harris A. (2011) *Performance beyond expectations*. Nottingham: National College for School Leadership.
- <http://www.ai.sri.com/~quam/Public/papers/ILC2005/20050529-Lisp-performance.pdf%5Cnhttp://dera.ioe.ac.uk/10022/1/download?id=151888&filename=performance-beyond-expectations-full-report.pdf>
- Hong, J. Y. (2012). Why do some beginning teachers leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching: Theory and Practice*, 18(4), 417-440. doi:10.1080/13540602.2012.696044
- Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology of Education*, 7(4), 399-420.
- Isaev, E. I., Kosaretsky, S. G., & Mikhailova, A. M. (2019). Western European experience of prevention and overcoming school failure among children living in families with low socio-economic status. *Journal of Modern Foreign Psychology*, 8(1), 7-16. doi:10.17759/jmfp.2019080101
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching: Theory and Practice*, 20(5), 530-546. doi:10.1080/13540602.2014.937957
- Kitching, K., Morgan, M., & O'Leary, M. (2009). It's the little things: Exploring the importance of commonplace events for early-career teachers' motivation. *Teachers and Teaching: Theory and Practice*, 15(1), 43-58. doi:10.1080/13540600802661311
- Korableva, O. N., Gorelov, N., & Kalimullina, O. (2020). Contemporary issues of intellectual capital: Bibliographic analysis doi:10.1007/978-3-030-48021-9\_51

- Kuznetsov V. M., Solovyova T. V., & Troshkov S. N. (2018). Modeling of motivational management of innovative activities of teachers in the formation of a resilient school. *Pedagogical IMAGE*, 12(1), 5-17. DOI: 10.32343 / 2409-5052-2018-12-4-5-17
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press.
- Latour, B. (2005). *Reassembling the social – An introduction to actor-network-theory*. Oxford University Press.
- Le Cornu, R. (2009). Building resilience in pre-service teachers. *Teaching and Teacher Education*, 25(5), 717-723. doi:10.1016/j.tate.2008.11.016
- Le Cornu, R. (2013). Building early career teacher resilience: The role of relationships. *Australian Journal of Teacher Education*, 38(4), 1-16. doi:10.14221/ajte.2013v38n4.4
- Leroux, M., & Théorêt, M. (2014). Intriguing empirical relations between teachers' resilience and reflection on practice. *Reflective Practice: International and Multidisciplinary Perspectives*, 15(3), 289-303. doi:10.1080/14623943.2014.900009
- Liu, M., Zha, S., & He, W. (2019). Digital transformation challenges: A case study regarding the MOOC development and operations at higher education institutions in China. *TechTrends*, 63(5), 621-630. doi:10.1007/s11528-019-00409-y
- Lupton, R. (2004). *Schools in disadvantaged areas: Recognising context and raising quality*. LSE STICERD Research Paper No CASE076. <https://ssrn.com/abstract=1158967>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- Luthar, S. S., Sawyer, J., & Brown, P. (2006). Conceptual issues in studies of resilience: Past, present, and future research. *Annals of the New York Academy of Science*, 1094, 105-115.
- Mansfield, C. F., Beltman, S., Price, A., & McConney, A. (2012). "Don't sweat the small stuff": Understanding teacher resilience at the chalkface. *Teaching and Teacher Education*, 28, 357-367. doi:10.1016/j.tate.2011.11.001
- Masteller, J., & Stoop, D. (1991). "The blame game". *Forgiving our parents, forgiving ourselves: Healing adult children of dysfunctional families*.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(4), 425-444.

- Masten A. S., Herbers J. E., Cutuli J. J., & Lafort T. L. (2008). Promoting competence and resilience in the school context. *Professional School Counseling, 12*(2), 76-84. doi:10.5330/PSC.N.2010-12.76
- Masten, A. S., & Obradovic, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences, 1094*, 13-27.
- Masten, A. S., & Powell, J. L. (2003). A resilience framework for research, policy, and practice. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 1– 25). Cambridge University Press.
- Medvedeva, G., & Mitina, G. (2021). Professional Development of Higher Education Institutions Pedagogical Workers in the Context of the Federal Project «New Opportunities for Everyone». *Russian Journal of Education and Psychology, 12*(3), 32-47. <https://doi.org/10.12731/2658-4034-2021-12-3-32-47>
- Morales, D., Ruggiano, C., Carter, C., Pfeifer, K., & Green, K. (2020). Disrupting to sustain: Teacher preparation through innovative teaching and learning practices. *Journal of Culture and Values in Education, 3*(1), 1-20. <https://doi.org/10.46303/jcve.03.01.1>
- More, C., & Rodgers, W. (2020). Promoting change within special education teacher preparation program: A collision of needs. *Journal of Culture and Values in Education, 3*(1), 104-119. <https://doi.org/10.46303/jcve.03.01.7>
- Morgan, M. (2011). Resilience and recurring adverse events: Testing an assets-based model of beginning teachers' experiences. *The Irish Journal of Psychology, 32*(3-4), 92-104. doi:10.1080/03033910.2011.613189
- Morgan, M., Ludlow, L., Kitching, K., O'Leary, M., & Clarke, A. (2010). What makes teachers tick? Sustaining events in new teachers' lives. *British Educational Research Journal, 36*(2), 191-208. doi:10.1080/01411920902780972
- Movchan, I. B., Shaygallyamova, Z. I., Yakovleva, A. A., & Movchan, A. B. (2021). Increasing resolution of seismic hazard mapping on the example of the north of middle russian highland. *Applied Sciences* (Switzerland), 11(11) doi:10.3390/app11115298
- Muravyova, A. A., & Oleinikova, O. N. (2017). Underestimated competence or pedagogical aspects of the formation of resilience. *Kazan Pedagogical Journal, 2*, 16-21.
- O'Sullivan, M. (2006). Professional lives of Irish physical education teachers: Stories of resilience, respect and resignation. *Physical Education and Sport Pedagogy, 11*(3), 265-284. doi:10.1080/17408980600986314
- Panova, E. P., Filimonova, N. Y., Bocharnikova, N. V., & Davydova, M. L. (2020). Project activities in the process of teaching foreign students. [Actividades de proyectos en el

- proceso de enseñanza de estudiantes extranjeros] *Utopia y Praxis Latinoamericana*, 25(Extra10), 151-162. doi:10.5281/zenodo.4155342
- Palmer, D., & Witanapatirana, K. (2020). Exposing bias through a deficit thinking lens using content-analysis of macro level policies. *Research in Educational Policy and Management*, 2(1), 23-39. <https://doi.org/10.46303/repam.01.02.2>
- Papatraianou, L. H., & Le Cornu, R. (2014). Problematising the role of personal and professional relationships in early career teacher resilience. *Australian Journal of Teacher Education*, 39(1), 100-116. doi:10.14221/ajte.2014v39n1.7
- Patterson, J. H., Collins, L., & Abbott, G. (2004). A study of teacher resilience in urban schools. *Journal of Instructional Psychology*, 31(1), 3-11. Retrieved from [http://www.projectinnovation.biz/jip\\_2006.html](http://www.projectinnovation.biz/jip_2006.html)
- Peters, J., & Pearce, J. (2012). Relationships and early career teacher resilience: A role for school principals. *Teachers and Teaching: Theory and Practice*, 18(2), 249-262. doi:10.1080/13540602.2012.632266
- Pinskaya, M. A., Havenson, T. E., Kosaretsky, S. G., Zvyagintsev, R. S., Mikhailova, A. M., & Chirkina, T. A. (2018). Above the barriers: Exploring resilient schools. *Education Issues*, 2, 198-227.
- Pinskaya, M. A., Kosaretsky, S. G., & Frumin, I. D. (2011). Schools that work effectively in complex social contexts. *Educational Issues. Educational Studies*, 4, 148-177. DOI: 10.17323 / 1814-9545-2011-4-148-177
- Pinskaya, M. A., Kosaretsky, S. G., & Krutiy, N. S. (2012). Accounting for contextual information in assessing the quality of school work. *Public Education*, 5, 31-35.
- Polat, S. (2020). Multidimensional analysis of the teaching process of the critical thinking skills. *Research in Social Sciences and Technology (RESSAT)*, 5(2), 134-157. <https://doi.org/10.46303/ressat.05.02.8>
- Pronk, S., Mulder, E. A., van den Berg, G., Stams, G. J. J. M., Popma, A., & Kuiper, C. (2020). Differences between adolescents who do and do not successfully complete their program within a non-residential alternative education facility. *Children and Youth Services Review*, 109. <https://doi.org/10.1016/j.childyouth.2019.104735>
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In *Risk and protective factors in the development of psychopathology*.
- Saenko, N., Voronkova, O., Volk, M., & Voroshilova, O. (2019). The social responsibility of a scientist: Philosophical aspect of contemporary discussions. *Journal of Social Studies Education Research*, 10(3), 332-345.

- Saenko, N., Voronkova, O., Zatsarinnaya, E., & Mikhailova, M. (2020). Philosophical and cultural foundations of the concept of “nihitogenesis”. *Journal of Social Studies Education Research (JSSER)*, 11(1), 88-103.
- Schelvis, R. M. C., Zwetsloot, G. I. J. M., Bos, E. H., & Wiezer, N. M. (2014). Exploring teacher and school resilience as a new perspective to solve persistent problems in the educational sector. *Teachers and Teaching*, 20(5), 622-637. doi:10.1080/13540602.2014.937962
- Seville, E., Brunsdon, D., Dantas, A., Le Masurier, J., Wilkinson S., & Vargo J. (2006). Building organizational resilience: A summary of key research findings. *Resilient Organisations Research Report 2006/04*. <http://hdl.handle.net/10092/649>
- Sharplin, E., O’Neill, M., & Chapman, A. (2011). Coping strategies for adaptation to new teacher appointments: Intervention for retention. *Teaching and Teacher Education*, 27, 136-146. doi:10.1016/j.tate.2010.07.010
- Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. *Teacher Education Quarterly*, 35(4), 57-76.
- Timberlake, M. (2020). Recognizing ableism in educational initiatives: Reading between the lines. *Research in Educational Policy and Management (REPAM)*, 2(1), 84-100. <https://doi.org/10.46303/repam.02.01.5>
- Ushakov, K. M. (2017). *How to make school better, or Social capital as a priority*.
- van Kessel, C. (2020). Teaching the climate crisis: Existential considerations. *Journal of Curriculum Studies Research*, 2(1), 129-145. <https://doi.org/10.46303/jcsr.02.01.8>
- Werner, E. E. (1990). Protective factors and individual resilience. In S. J. Meisels & J. P. Shonkoff (Eds.), *Handbook of early childhood intervention* (pp. 97–116). Cambridge University Press.
- Zhang, Y. and B. M. Wildermuth. (2009). *Qualitative analysis of content*. In Applications of social research methods to qualitative studies in information and library, ed. B. Wildermuth, 1–12. [http://www.ils.unc.edu/~yanz/Content\\_analysis.pdf](http://www.ils.unc.edu/~yanz/Content_analysis.pdf)