Stress, resilience, and creativity of teachers

Alex Cristian Brezan
"Catin Păunescu" Special Secondary School, Iasi, Special Education Teacher
Valentina Georgeta Vartic
University of Bucharest, Faculty of Psychology and Educational Sciences, Senior Lecturer, PhD.

Abstract
The article makes a foray into the specialized literature of recent years regarding stress, resilience, and creativity in general but also with reference to teaching staff. The high stress to which teachers are subjected throughout their careers can sometimes even lead to the phenomenon of burnout. The level of resilience of teaching staff is important. It is related to the level of stress, the latter being a trigger for resilient behavior. Creativity is a component of personality and a necessary characteristic in the activity of teaching staff that can be involved in resilient behavior. The research brings new elements about the levels of stress, resilience and creativity encountered in teachers working in mainstream and special education and was carried out after the period of the COVID-19 pandemic.

Keywords: teachers, stress, creativity, resilience, burnout

Introduction
Concern for carrying out teaching activities in the best possible conditions also implies concern for the well-being of the main participants in this process. Studies in recent years have shown an increase in the level of stress and anxiety in the entire population because of the covid-19 period, but also among teachers. Research (Robinson et al., 2022) highlighted, among other things, the fact that teachers faced stress related to their professional and personal roles, showing serious concerns during the covid-19 period. Stress at work can lead to teacher absenteeism, mental health impairment and poor work results. Factors that contribute to a better adaptation of teachers to stressful situations were also identified: classroom management self-efficacy, collegial attitude, management attitude, correct practices and school discipline. (Herman et al., 2021). Therefore, monitoring teacher stress and providing appropriate support is required (Pressley et al., 2021).

Studies on teachers' stress also suggested directions of studies for future research such as: the effects of educational reforms on the level of stress of the teachers, the reasons that determine on the part of the teachers different levels of involvement and commitment to work, the research of the stress from the perspective of two triggers: excessive demands and preoccupation with one's self-image, studying the role of the teacher-student relationship and classroom climate for teacher stress. (Kyriacou, 2001). Among the factors that can generate states of stress among teaching staff, you can list or count: high workload, preparation of materials and tests, conflicts with work colleagues or with students and parents, low level of remuneration, low motivation for learning the students. Other reasons for triggering stress would be a large number of students in a class, the
inappropriate and tiring environment, certain elements of bureaucracy, the attitude that students have towards the teaching staff of the educational units they belong to. Although the importance of education has been recognized worldwide and developed countries spend a large part of their budget on education, with teachers having a significant position and teacher performance being the fundamental concern of educational institutions, they remain in many countries only at the level of expectations. The psychological security of teachers defines the quality and favorable climate that students need in the learning process. Teachers who can control their reactions to stress feel more secure at work, which determines a better quality of teaching and learning and creates a pleasant climate for students. The stress perceived by teachers is also influenced by the place and conditions of activities. Bettini et al. (2017) consider that the role of a special education teacher is more difficult and stressful than the role of a teacher in mainstream education. Although until a few years ago the teaching profession was not considered to have a high level of stress, like doctors or firefighters, in 2019, by Law number 131/2019 on staff salaries, teaching staff in education receive an increase in neuropsychological overload of 10% of the basic salary, this fact showing the relatively high level of stress among teaching staff.

Wald et al. (2006) state that resilience refers to positive adaptation, the ability to maintain or regain mental health, in the face of adversity. Resilience is the ability of a system to face disturbances, to last night organize during them to keep the same functions, structure and identity. There are multiple sources and pathways to resilience often interacting, including biological psychological dispositional attributes, but also social support and other attributes of social systems such as family, school, friends, community. Ionescu (2013) considers that there are two elements necessary to the concept of resilience, the first refers to the fact that resilience is characterized by a person who once experienced a traumatic event or chronic adversity, this fact indicating a very good adaptation capacity; the second aspect is that resilience is a result of the Interactive process between a person, the environment, and the family. A series of research has focused on the individual values involved in resilience, such as the significant role of other people but also school management. Moral goals and ethical values are believed to provide important intellectual emotional and spiritual strengths that enable teachers to increase their capacity for resilience. Also, the desire to make a difference in children's lives encourages many teachers who decide to stay in school and be involved in the vocational and professional side during their careers. Johnson et al (2004) show that all this can erode over time if teachers only experience a deep connection with students with their peers and leaders. Gu and Day (2013) studied the nature of teacher resilience as a product of the interaction between personal biographies and work-based events, values, relational and organizational factors. They argue that teachers' resilience is not primarily associated with the ability to recover from traumatic experiences and events, and especially with the ability to maintain balance and a sense of engagement and action in the daily environments in which they work, operates.

Creativity is considered a process, a product, or a dimension of personality and is based on the interdependence of subjective and objective factors that end with the subject obtaining new original results valuable and useful for society. Creativity can be influenced by several factors that can be divided into two categories: psychological factors and socio-human factors. Psychological factors refer to intellectual factors: divergent thinking, imagination and intelligence and non-intellectual factors: social skills, temperamental factors and affective motivational factors. Contributive creativity is self-determined and based on a clearly formulated problem (Unsworth, 2001). Contributive creativity can be demonstrated when teachers work in teams and try to solve
problems beyond the classroom. Collaboration, teamwork, shared responsibility, and commitment are associated with contributory creativity.

Method

The purpose of the present research is to measure and interpret the possible differences between the level of stress, resilience and creativity found in teaching staff from mainstream education and from special education.

The objectives of the research

1. Evaluation of the level of stress, resilience and creativity;
2. Highlighting the differences between the two categories of investigated subjects.

After the theoretical study and the observations, we formulated the following hypotheses:

1. It is assumed that the level of stress is higher for special education teachers than for mainstream education teachers.
2. It is assumed that the level of resilience is lower in mainstream education teachers than in special education teachers.
3. It is assumed that the level of creativity is higher in special education teachers, compared to mainstream education teachers.

The participants in the study were 60 teachers, of which 30 middle school level teachers from mainstream schools and 30 middle school level teachers from special education. Of these, 12 were male and 48 were female, the age of the subjects was between 26 and 61 years, the average age being 42 years.

To evaluate the level of stress of teaching staff, we used the Perceived Stress Questionnaire developed by Levenstein et al. (1993). This tool aims to evaluate the level of perceived stress, being made up of 30 questions.

To assess the level of resilience of teaching staff, we used the "Questionnaire for assessing the level of resilience" made by Oshio et al. in 2003. The main role of this tool is to assess the general level of resilience. The results can be evaluated in the general form, or divided into three subscales: search for novelty, emotional regulation and positive orientation for the future.

To be able to evaluate the level of creativity of the teaching staff, we used the creativity test called "Titles for a picture", made by Stoica and Caluschi, in 1986. This assessment tool measures the most important intellectual factors of creativity such as fluency of ideas, flexibility of thought and originality. Subjects must assign as many, and as original, titles to an image as possible.

Findings and discussion

The results to variable "Stress Level" indicate a difference between the average scores on the questionnaire for assessing the level of perceived stress of teachers in mainstream education and that of teachers in special education. The group of teachers in mainstream education obtained, on average, a lower value for the level of perceived stress (67.5), compared to the group of teachers in special education (69.3). If we analyze the Standard Deviation, we notice that for both groups of subjects it has the value 9. This indicates that out of the total of 60 subjects investigated, only 24 obtained stable results for the variable "Stress Level".

According to the interpretation made by Levenstein et al., at the group level, both the subjects in mainstream education and those in special education fall under a moderate level of stress. At batch
level, teachers in mainstream education fall into the following categories: 13.3% (4)-low stress level; 86.7% (26)-moderate level of stress. At batch level, special education teachers fall into the following categories: 10% (3)-low stress level; 90% (27)-moderate level of stress. So, the data we previously obtained confirmed the first of the hypotheses as well as the information from the specialized literature, according to which teachers are subject to a considerable level of stress at work, because of the multitude of factors that act on them.

Regarding the level of resilience, the averages obtained by special education teachers and the averages obtained by those in mainstream schools, on the Scale for measuring the level of resilience made by Oshio, indicated statistical differences for the following four dimensions: general index, search of novelty, emotional regulation and positive orientation towards the future. At the level of the general index of the level of resilience, special education teachers scored higher on average than mainstream education teachers.
### Table 1. Descriptors of separate levels of resilience

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special education teaching staff novelty search score</td>
<td>30</td>
<td>24.8</td>
<td>25.0</td>
<td>2.67</td>
<td>0.488</td>
</tr>
<tr>
<td>Novelty search score for teaching staff in mainstream education</td>
<td>30</td>
<td>23.6</td>
<td>23.5</td>
<td>3.08</td>
<td>0.562</td>
</tr>
<tr>
<td>Emotional regulation score special education teachers</td>
<td>30</td>
<td>27.1</td>
<td>27.0</td>
<td>4.04</td>
<td>0.737</td>
</tr>
<tr>
<td>Emotional regulation score of teachers in mainstream education</td>
<td>30</td>
<td>25.1</td>
<td>25.0</td>
<td>2.79</td>
<td>0.510</td>
</tr>
<tr>
<td>Positive orientation score for special education teaching staff</td>
<td>30</td>
<td>19.9</td>
<td>20.0</td>
<td>3.92</td>
<td>0.715</td>
</tr>
<tr>
<td>Score positive orientation towards the future teaching staff of mainstream education</td>
<td>30</td>
<td>20.5</td>
<td>20.5</td>
<td>3.85</td>
<td>0.703</td>
</tr>
</tbody>
</table>

In the subscale search for novelty and emotional regulation, special education teachers scored higher on average than mainstream teachers. On the subscale - positive orientation towards the future, the difference was significant in favor of teachers from mainstream education. On the subscale - the level of novelty seeking, special education teachers scored higher on average than mainstream education teachers. Referring to the ranges from the interpretation made by Oshio et al., both special education teachers and mainstream school teachers fall into the middle level category, being in the 24-30 range. As in the previous case, it should be noted that the average score obtained by teachers in mainstream education is close to the lower limit of the corresponding range. Therefore, the data we previously obtained confirmed the second hypothesis.

The data obtained from the creativity test indicated a difference between the averages of teachers in mainstream education and those in special education, they obtained higher average values. According to the rating standard of the creativity test developed by Stoica and Caluschi (1986), the teaching staff obtained results that fit them into the following categories: Special education teachers - 10.8 points (approximately 11); Teaching staff in mainstream education - 9.77 points (approximately 10). For scores between values 8-9, the qualification of weak level is given in terms of the level of creativity, and for values between 10-12, the qualification of weak normal level is given. Considering that the results of both batches were approximated to whole numbers, both categories fall into the weak normal level. If we report from a statistical point of view, special education teachers obtained a higher score on the general level of creativity, compared to mainstream education teachers.
Therefore, the data we previously obtained confirmed the third of the general hypotheses, as well as the working hypotheses from which we started.

**Conclusion**

In conclusion, the data obtained in this research confirmed all two hypotheses. Thus, special education teachers obtained on average higher scores for all three selected variables, namely stress level, resilience and creativity, compared to mainstream education teachers. On the other hand, however, for the variable that evaluates the level of creativity, both groups of subjects obtained similar results, but on average higher for special education teachers.

The present research has primarily highlighted a significant difference in the level of stress between the two types of teachers, namely that the stress level of special education teachers is on average higher compared to those teachers in mainstream schools. We can associate this fact with the difficulties resulting from the interaction with children with various deficiencies, with whom these teaching staff interacts daily.

Thus, we consider that it would be appropriate for both types of teachers to have a program of knowledge and assimilation of different coping methods, which have the role of reducing the level of stress, and increasing the level of resilience, which aims to improve the quality of personal and professional life.

**Reference**


