

Resilient Primary School Teachers in Pandemic Times and their Self-Assessment on the Quality of Online Teaching Activity. A Retrospective Analysis

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Abstract

Keywords:

Teachers' resilience; online teaching; teachers self-assessment; teachers perceived online teaching.

Through this study we aimed to explore how primary school teachers were able to adapt their teaching practices in the online context during the COVID-19 pandemic and which were the protective factors that contributed to the development of resilience. We focused on their self-assessment of online teaching quality and investigated its correlation with their level of resilience. In measuring the resilience levels of primary school teachers we have taken into account risk and protective factors. Thus, we observed that social and family support had the greatest influence on the formation of resilient attitudes among teachers. The majority of the teachers that participated in this study scored a high and very high level of resilience. We obtained a positive correlation between the chosen variables: primary school teachers' level of resilience and their self-assessment on the quality of their own online teaching during the quarantine caused by the COVID-19 pandemic.

Zusammenfassung

Schlüsselworte:

Belastbarkeit von Lehrern;
Online-Unterricht;
Selbsteinschätzung der Lehrer;
Wahrnehmung von Lehrern des
Online-Unterrichts.

Mit dieser Studie wollten wir untersuchen, wie Grundschullehrer ihre Unterrichtspraxis im Online-Kontext während der COVID-19-Pandemie angepasst haben, und welche Schutzfaktoren zur Entwicklung der Resilienz beitrugen. Wir konzentrierten uns auf ihre Selbsteinschätzung der Qualität des Online-Unterrichts und untersuchten deren Zusammenhang mit ihrem Resilienzniveau. Bei der Messung des Resilienzniveaus von Grundschullehrern haben wir Risiko- und Schutzfaktoren berücksichtigt. So stellten wir fest, dass die soziale und familiäre Unterstützung den größten Einfluss auf die Ausbildung einer resilienten Einstellung bei den Lehrern hatte. Die Mehrheit der Lehrer, die an dieser Studie teilnahmen, wies ein hohes und sehr hohes Resilienzniveau auf. Wir erhielten eine positive Korrelation zwischen den ausgewählten Variablen: das Resilienzniveau der Grundschullehrer und ihrer Selbsteinschätzung der Qualität ihres eigenen Online-Unterrichts während der durch die COVID-19-Pandemie verursachten Quarantäne.

1. Introduction

Along with the COVID-19 pandemic and the shift of the educational process into the online environment, differences of opinion have emerged among educational practitioners regarding the quality of teaching activities. Some of them perceived this transformation of educational practices as an adaptation to the needs of today's society - a digitalised, knowledge-based society. Others looked forward to returning to the traditional model of teaching, with physical presence at school, considering the school environment as an essential formative factor in achieving educational goals.

From the perspective of teachers' adaptability to change, we believe that resilience could be a good predictor for ensuring the quality of teaching activities. Thus, the level of resilience could be the source of differences of opinion mentioned above. A

teacher who manages to overcome some psychological, cognitive or social barriers will be more likely to be effective in teaching and to facilitate students' learning regardless the context. However, the validation of this prediction could be verified only through an extensive system of internal and external evaluation on the quality of educational services, which were conducted online. In this study we particularly focused on teachers' attitudes towards the online teaching activity and their perception of it. We looked on the extent of primary school teachers' preference for a sanogenous, problem-solving approach in critical situations and whether we could find pedagogical optimism among teachers in times of reform or change.

Therefore, through this study we aimed to investigate whether there is a significant relationship

between the level of resilience of primary school teachers and their self-assessment on the quality of their own online teaching activities carried out during the quarantine caused by the COVID-19 pandemic.

2. Theoretical foundation

Given the challenges imposed by the pandemic context, resilience has become an essential mechanism for maintaining the mental health and well-being of teachers. Although there is relatively limited and recent research approaching the topic of resilience, we have not identified an agreed operational definition of the concept. However, most authors describe resilience in terms of “positive adaptation, or the ability to maintain or regain mental health, despite experiencing adversity” (Herrman, et al., 2011, p. 259). The complex nature of resilience, as well as approaching it from a multidisciplinary perspective, has led to the formulation of numerous definitions that focus on different aspects of this construct (Niță & Pârvu, 2020; Sikorska, 2014).

Firstly, we mention the three-dimensional approach to resilience, which can be described:

- *as a personality trait* that is influencing human behaviour since birth. It allows a person to function in an adapted way despite the circumstances. There exists a latent form of resilience that is triggered in risk situations (Crăciun, 2018; Toia, 2019).

- *as a process* of adaptation and overcoming adversity. This paradigm focuses on the phases of adaptation, cushioning the effects of adversity and rebound from adversity (Roosa, 2000), but also on the factors that influence the process of adaptation and overcoming difficulties (Egeland, Carlson, & Sroufe, 1993; Kolar, 2011).

- *as a result* of the interaction between personal factors (emotions, values, cognitions, etc.) and the events to which an individual is exposed. In this case, by resilience we are referring to “the capacity to maintain equilibrium and a sense of commitment and agency in the everyday worlds in which teachers teach” (Gu & Day, 2013, p. 26).

Maintaining a balance between risk and protective factors.

Some authors introduce and emphasise the presence of risk factors as a defining element in explaining resilience (Masten & Coatsworth, 1998; Hauser & Allen, 2006; Beltman, Mansfield, & Price, 2011). Alternatively, several studies focus on

identifying protective factors that contribute to the formation and development of resilience, such as:

- personal characteristics (intelligence, optimism, temperament, empathy, self-efficacy), family and filial support, community (Masten & Garmezy, 1985);

- discernment, independence, interpersonal skills, initiative, creativity, humour, morality (Wolin, 2003);

- sociability, communication skills, personal attributes, family encouragement, appreciation, socio-economic status, school experience, community of reference etc. (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003)

- self-esteem, positive self-image, sense of control over life, humour, ability to elicit sympathy, creativity, presence of "resilience tutors" (Ionescu, 2013, p. 35)

From this perspective, resilience is an individual's ability to maintain a balance between risk and protective factors. In this paper we intended to explore resilience factors at all three levels proposed by Masten & Garmezy (1985): personal resources, family coherence and social resources. The risk factors we have identified were: restrictions imposed by the state of emergency, changes in educational practices, the quarantine, instability and social distress. We believe that teachers' self-assessment on the quality of their own online teaching activity in this context represent a parameter for their ability to maintain a balance between the risk factors to which they were exposed and the protective factors they had at their disposal.

3. Research methodology

Our research interest was to conduct an epistemic analysis on the adaptability of primary school teachers. The pandemic context, the quarantine and the transformation of the educational environment from onsite (at school) to online (school from home) represented risk factors that destabilized and endangered the whole social and educational system. Under these circumstances, resilience as a personality trait of teachers may have significantly contributed to ensuring the quality of teaching and, hence, supporting student learning even remotely.

The aim of the research was to verify whether there is a relationship between the level of resilience of primary school teachers and their self-assessment

on the quality of their own online teaching activity during the quarantine caused by the COVID-19 pandemic.

We have formulated the following **research questions** that structure the research approach:

- What is the overall level of resilience of primary school teachers?
- How do primary school teachers self-assess their remote online teaching activity in terms of quality?
- How does age, teaching experience, teaching grade or biological gender influence primary teachers' level of resilience and/or their self-assessment on the quality of their online teaching activity?
- Is there a correlation between the level of resilience of primary school teachers and their self-assessment on the quality of their own online teaching activity during the quarantine caused by the COVID-19 pandemic?

Research hypothesis: Primary school teachers' level of resilience correlates positively with their self-assessment on the quality of their own online teaching activity during the quarantine caused by the COVID-19 pandemic.

In order to verify the hypothesis, we conducted a questionnaire-based survey. The questionnaire was distributed online in Google Forms format via several teachers' groups on social media. Through the questionnaire we collected data on the two research variables. The variables were measured using the two scales retrieved, translated and adjusted:

- *RSA: Resilience Scale for Adults* (Friborg, 2003)
- *Teach tool* (Molina, et al., 2020) – a scale for measuring the quality of teaching in primary school education.

Participant sample. A sample of 81 primary school teachers from Romania participated in the research, most of them working in Cluj county (63%). Out of these, 46.9% work in urban areas and 53.1% in rural areas. A percentage of 33.3% were aged between 19 and 30, 44.4% were between 31 and 45, and the remaining 22.3% were older than 45 years old.

4. Results

The descriptive analysis of the data recorded with Resilience Scale for Adults (Friborg, 2003) indicates an asymmetric and negative distribution of the scores

obtained by the participants on this variable (Figure 1). Therefore, we can infer that teachers who responded to our questionnaire generally had high and very high levels of resilience. The items proposed in the RSA: Resilience Scale for Adults (Friborg, 2003) were grouped into five subcategories of protective factors that contribute to the development of resilience: personal competence, social competence, personal structure, social support and family coherence. We analysed the data for each subcategory of protective factors and observed that the highest scores were recorded for the dimensions: social support and family coherence. We understand, therefore, that social and family support have the greatest influence on the formation of resilient attitudes among teachers. The scores obtained for the level of resilience were rated on a scale from 1 to 5, where 1 means very low and 5 means very high. Respondents scored between 2.54 and 5, the mean score was 4.26 and the median value was 4.32. Analysing the levels of resilience in relation to the age of the respondents, we observe that the most resilient were teachers aged between 36 and 45 (Figure 2). This can be explained by the typical stability at this stage of life, which generally does not involve major changes or unexpected life events.

Figure 1. Histogram for the variable resilience of primary school teachers

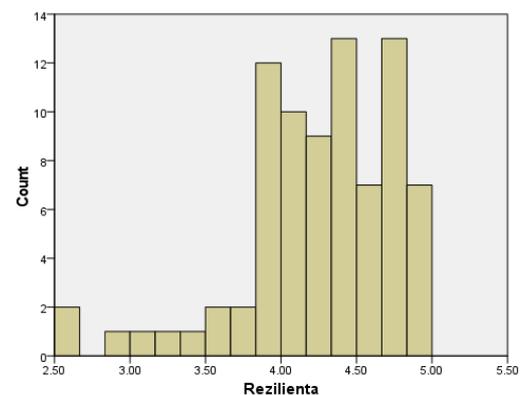
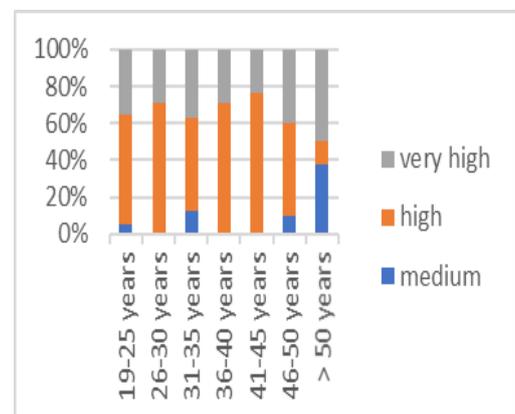


Figure 2. Resilience level according to the age of respondents



Similarly, we analysed data for the second variable: self-assessment of primary school teachers

on the quality of their own online teaching activity carried out during the quarantine caused by the COVID-19 pandemic. In this case as well, we obtained a negative skewed distribution of the recorded scores (Figure 3), with a very high mean score of 4.52, from the maximum value of 5, and a range of scores from 2.85 to 5, with the central value being 4.7. So, at the primary education level, teachers perceive that they had kept providing high quality educational activities even during remote education on digital platforms. Or at least, teachers' satisfaction with their own teaching was high. The high scores for this variable can also be explained by the fact that the participants self-assessed their teaching activity retrospectively, when the quarantine was over and they were back in school physically. Analysing primary teachers' self-assessment on the quality of their own online teaching activity in relation with the grade they teach, we observed that teachers of preparatory, second, and fourth grades mostly self-assessed their activity at a very high quality level (Figure 4).

Figure 3. Histogram for the variable self-assessment of primary school teachers on the quality of their own online teaching activity

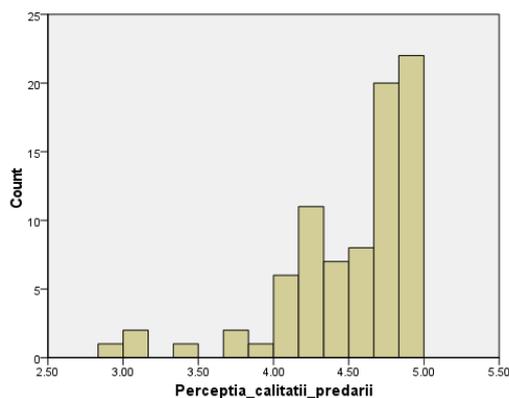
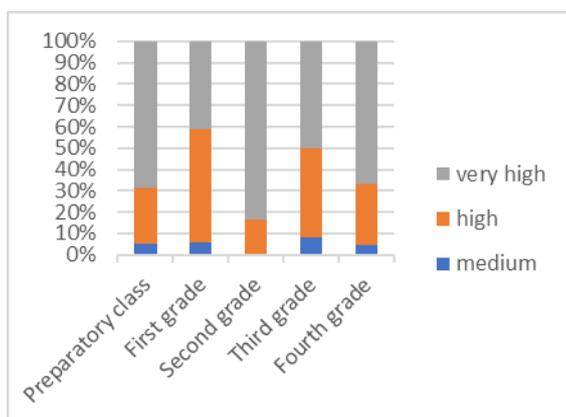


Figure 4. Self-assessed quality of online teaching activity in relation with the grade they teach



Since the distribution of the data recorded for the two research variables were not normally distributed, we decided to use the Rho Spearman test to establish the correlation between them. From the data recorded in Table 1, it can be observed that there

is a statistically significant correlation between the research variables: resilience of primary school teachers and their self-assessment on the quality of their own online teaching activity ($p=.00<.01$).

Table 1. Correlational analysis of research variables

| Variables | Mean (Std. Dev.) | 1 | 2 |
|---|------------------|-------|---|
| 1. Resilience of primary school teachers | 4.52 (.45) | - | |
| 2. Self-assessment of primary school teachers on the quality of remote online teaching activity | 4.26 (.51) | .63** | - |

A correlation coefficient $\rho = .63$, $p < 0.01$, was obtained between primary school teachers' resilience and their self-assessment on the quality of online teaching activity. The positive nature of the correlation coefficient indicates the positive correlation between the chosen variables. This means that 63.3% of the variance of primary school teachers' resilience is explained by their self-assessment on the quality of their own online teaching activity. Thereby, the hypothesis of our research was confirmed.

5. Discussions and conclusions

This research has an analytical character, the correlation identified having an explanatory function for an important aspect of the educational phenomenon: adaptability to change and reform. The high and very high scores recorded for the two chosen variables: the level of resilience and the self-assessment of primary school teachers on the quality of their own online teaching activity, reveal a pedagogical optimism among the participants in this study. Questioning a larger group of participants and using qualitative research methods in parallel would have provided a clearer picture of the variables chosen and the correlation between them. Another limitation of this study is that the items of the Teach tool Scale (Molina, et al., 2020) were developed for the assessment of the quality of instruction carried out physically in the classroom. This scale could be revised and extended for the online teaching version for a better internal validity.

We consider that the findings of this study are relevant for teachers - concerned with increasing the quality of teaching, for educational managers - interested in the well-being, resilience and recruitment of effective teachers, and for researchers - focused on

broadening the horizon of theoretical and practical knowledge about resilience. In this way, some future research directions are emerging, such as: research on methods, techniques and practices that could stimulate and support resilience of educational agents; correlation analysis between resilience and teaching quality from the perspective of external evaluation; checking the relationship between the level of resilience of the teacher and the resilience of his/her students, and so on.

Authors note: The authors have equal contributions to this article.

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