

# Protective Factors and Burnout Risk of Teachers During the COVID-19 Pandemic – A Two-Step Cluster Analysis

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## Abstract

Teacher burnout has been shown to be one of the most common negative consequences of the COVID-19 pandemic. This study aimed to identify distinct psychological resources and burnout risk profiles of teachers and examine their association with Kolb's educator roles and their professional experience. Methods: The survey data were collected from 330 preschool and primary school (84 males,  $M_{age} = 38.3$ ,  $SD = 9.14$ ) teachers using a convenience sampling method. Results: The two-step cluster analysis revealed two distinct profiles. The first profile, "high psychological resources, no burnout risk," was characterized by absent symptoms of burnout and increased levels of well-being, self-control, and positive emotionality. The second profile, "moderate psychological resources, mild burnout," was associated with medium levels of well-being, self-control, and positive emotionality accompanied by mild burnout. Our findings highlighted that cluster one had a significantly higher score for the facilitator role and cluster two for the expert and coach roles. Additionally, teachers with less professional experience were more likely to belong to cluster one, considering their adequate skills in digital literacy. Conclusions: These findings provide new insights into the explanation of teacher burnout and the design of intervention programs.

## Keywords:

COVID-19, positive emotionality, professional experience, self-control, teacher burnout, well-being

## Introduction

The last two school years have been extremely challenging for most teachers. At first, there was an unprecedented situation generated by the coronavirus pandemic caused by COVID-19, which led to the total closure of schools in March 2020. Then, teachers experienced other new changes in the organization of the instructional-educational process during the 2020–2021 school year. Specifically, they were forced to adapt quickly to different teaching approaches, such as social distancing classes, hybrid teaching, and virtual instruction, and juggle between them depending on government policies and the rate of infection.



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The new demands added more difficulties to the already-full workloads of teachers. These professionals were affected by burnout, anxiety, and increased depression even before COVID-19 (Ferguson et al., 2012; Mahan et al., 2010; McLean & Connor, 2015). Such symptoms lead to frustration, dissatisfaction with teaching, job absenteeism, and low self-efficacy (Arvidsson et al., 2019; Capri & Guler, 2018; Pellerone et al., 2020).

## Theoretical Background

### *Work-related burnout of teachers*

Teacher burnout was first conceptualized by Maslach et al. (1997) as a tripartite model of three progressive stages of burnout. The first stage, exhaustion, is described as emotional and physical fatigue resulting from having too many demands and insufficient resources to meet them. The next stage, cynicism, is characterized by increased apathy, decreased empathy, and feelings of resentment or blame for others in the educational endeavor, including administrators, parents, and students. The final stage of burnout is a lack of accomplishment when teachers perceive that the job is impossible and no longer believe they can teach successfully. Additionally, the socio-contextual burnout (Pietarinen et al., 2013) is highlighted by the professional community, and teacher-pupil interactions are the primary arenas of teacher burnout, particularly concerning perceived inadequacy and cynicism.

In the general context of the impoverishment of the teaching occupation (Ferguson et al., 2012), the psychological resources of teachers were negatively affected by the pandemic crisis, with new stressors proximal to burnout, such as fear of COVID-19 (Stănculescu, 2021), anxiety about teaching demands, parent communication, and administrative support (Pressley, 2021; Răducu & Stănculescu, 2022). The lack of resources also affected the accomplishments of teachers, demonstrating that the greater the perception of a resource deficit, the lower teachers perceive their accomplishments (Sokal et al., 2020). Moreover, social relationships at all levels were impacted by the coronavirus pandemic, increasing the socio-contextual burnout reported among teachers (Pietarinen et al., 2021; Pyhältö et al., 2020).

Thus, it is critical to help teachers face this difficulty by identifying the protective factors that help safeguard them and promote optimal adaptability and resilience during stressful times at work (Ainsworth & Oldfield, 2019; García, 2019; Răducu & Stănculescu, 2021). Identifying the profiles of teachers who thrive in online teaching settings could improve psychosocial support (McKenzie et al., 2019; Răducu & Stănculescu, 2021) and the work lives of teachers (Farley & Chamberlain, 2021; Kumar et al., 2021; Vercambre et al., 2009). Additionally,

preventing burnout increases the self-efficacy of teachers, job satisfaction, engagement, and well-being (Abós et al., 2019; Capri & Guler, 2018; Christensen et al., 2020; Fathi & Saeedian, 2020; Hampton et al., 2020; Perera et al., 2018).

Moreover, preventing teacher burnout improves the personal and professional lives of teachers and the online behavior of students (Piro et al., 2021). This situation creates a stable learning environment (Kalyon, 2020; Lam et al., 2009; Sönmez & Betül Kolaşınlı, 2021), stimulating the motivation and learning of students (Harriott & Kamei, 2021; Lam et al., 2009; Shen et al., 2015).

### *Individual Traits in Preventing Teacher Burnout*

The most common individual characteristics discussed in the literature are emotional intelligence (EI). The trait EI is a set of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies and described under four dimensions: well-being, self-control, positive emotionality, and sociability (Petrides & Furnham, 2001).

There is a mounting body of evidence lending support to the critical role of EI competency and the organizational commitment, job satisfaction, performance, self-efficacy, self-esteem, well-being, and health indicators of teachers in the educational field (Anari, 2012; Fabio & Palazzeschi, 2008; González-Valero et al., 2019; Mohamad & Jais, 2016; Penrose et al., 2007; Sahin, 2017; Stănculescu, 2014; Toprak & Savaş, 2020; Vesely et al., 2013). EI also decreases occupational stress and prevents burnout symptoms and negative feelings (García, 2019; Kumara, 2021; Leonova et al., 2021; Martínez-Monteagudo et al., 2019; Răducu & Stănculescu, 2021; Schoeps et al., 2021). Similarly, EI has been revealed by several studies to be crucial for supporting the academic and social development of students in the teacher-student relationship (Alam & Ahmad, 2018; Chişa & Rusua, 2016; Curoi et al., 2014; Fabio & Palazzeschi, 2008).

Emotional resources were also related to personality traits and burnout. For instance, a significant relationship between personality types, EI, and the three dimensions of burnout was revealed in the study by Pishghadam and Sahebjam (2012). It was indicated that the best predictors for emotional exhaustion were neuroticism and extroversion, the intrapersonal scale of EI and agreeableness for cynicism, the interpersonal scale of EI, and conscientiousness for personal accomplishment.

### *Work-related Traits in Preventing Teacher Burnout*

Concerning work-related characteristics, we consider the teaching role and professional experience to be the most relevant for the present study because they

have been mentioned in the literature as essential in profiling teachers (Albuquerque et al., 2014; Garvis et al., 2011; Kolb et al., 2014; Răducu & Stănculescu, 2022).

There is a small body of research investigating the link between teaching roles and burnout. Still, it has been highlighted in a few studies that teachers who guide and direct students by asking questions, exploring options, and suggesting alternatives (Facilitator role) are the least likely to experience burnout (Akbari & Tavassoli, 2011; Ghanizadeh & Jahedizadeh, 2016; Hosseini Fatemi & Raoufi, 2014). Regarding profiling teaching roles, in his theory of experiential learning (ELT), Kolb (2014) proposed a framework, the educator role profile (ERP). Four different types of educators who teach using four teaching roles were described in ERP: (1) the facilitator, who helps learners get in touch with their personal experience and reflect on it, (2) the expert, who helps learners organize and connect their reflections to the knowledge base of the subject matter, (3) the evaluator, who adopts an objective results-oriented role, and (4) the coach, who helps learners apply knowledge to achieve their goals. This framework was used in this research to obtain information concerning the link between teaching roles and burnout.

Professional experience is also identified in the literature as a significant factor in preventing burnout. In this regard, it has been shown in previous studies that teachers with more professional experience were less vulnerable to burnout (Pietarinen et al., 2021; Pyhältö et al., 2020; Tikkanen et al., 2017). Nonetheless, the levels of stress and anxiety were increased by the pressure of moving the whole instructional process to a remote environment concomitant to learning in a short time with the use of new technologies (Fernández-Batanero et al., 2021; Knopik & Domagała-Zyśk, 2022; Wang & Li, 2019) and generated exhaustion and burnout even in the case of experienced teachers (Pressley, 2021; Răducu & Stănculescu, 2022). Moreover, it has been revealed in the few studies conducted in the pandemic context that older teachers often have weaker digital skills, highlighting the need for professional development in using digital technologies (Hämäläinen et al., 2021). At the same time, the younger teachers used more tools for teaching and learning, demonstrated better digital competence, and had more confidence in using digital technology and openness to new technology (Lucas et al., 2021).

Recently, there has been an increased interest in individual variations in teacher burnout in identifying teacher burnout profiles (Mäkikangas & Kinnunen, 2016; Pyhältö et al., 2020). Burnout has been clustered with protective factors, such as well-being, work engagement, resilience and coping strategies, self-efficacy, and collaboration within the community (Ferradás et al., 2019; García, 2019; Pyhältö et al., 2020;

Salmela-Aro et al., 2019; Tikkanen et al., 2017). Still, the results on teacher prevention burnout profiles and factors contributing to individual variations were insufficient. Teachers may engage in different personal capacities and utilize various strategies to relieve stressors depending on their profiles. Extending the small body of literature examining individual variations and their determinants in preventing teacher burnout is required in this regard.

This study aimed to identify distinct psychological resources and burnout risk profiles in preschool and primary school teachers and examine their relationships with Kolb's educator roles and professional experience. This analysis aimed to identify homogeneous groups or clusters based on their common characteristics. Considering previous studies on the relationship between well-being and teacher burnout (Bakioğlu & Kiraz, 2019; Ballantyne & Retell, 2020; Ferradás et al., 2019; Vesely et al., 2013), we developed the first research question (RQ1): Were there distinct teacher profiles based on psychological resources (e.g., well-being, self-control, positive emotionality, and burnout risk) during the COVID-19 pandemic? Based on the well-established association between professional experience (Salmela-Aro et al., 2019; Tikkanen et al., 2017; Vercambre et al., 2009) and burnout, we developed the second research question (RQ2): Was there a positive association between profile membership and sociodemographic variables? Lastly, the teaching role has been linked to burnout by previous studies (Akbari & Tavassoli, 2011; Ghanizadeh & Jahedizadeh, 2016; Hosseini Fatemi & Raoufi, 2014). Therefore, we developed our third question (RQ3): Was there a positive association between profile membership and Kolb's educator roles?

## Methods

### Participants

The sample for this research was composed of 330 Romanian teachers ( $N = 108$  preschool teachers,  $N = 222$  primary school teachers, 75% women,  $M_{\text{age}} = 38.3$  years,  $SD = 9.14$ ). Their reported professional experience was less than one year (4.5%), between two and five years (10.9%), between six and 10 years (19.1%), between 11 and 20 years (25.5%) and more than 20 years (40%). A convenience sampling method was used. The sample was selected from the teacher register held by the Ilfov School Inspectorate via an e-mail paper survey sent to teachers. The total response rate was 45% from registered teachers.

### Procedure

All the teachers were fully informed of the details of the study, and the confidentiality of all data obtained was guaranteed before the professionals completed the survey. The survey comprised two sections.

The first section refers to the sociodemographic information of participants (e.g., gender, teaching grades, years of professional experience, and the urban or rural teaching environment). The second section involved reporting the levels of burnout, well-being, self-control, positive emotionality, and the preference for a specific type of teaching role. The study was conducted under the Declaration of Helsinki. The study was also approved by the University of Bucharest Ethics Committee (no 11/ 26.04.2021) and followed its recommendations. Data were collected via Google Forms during spring 2021. The link to the online survey was posted with a short description of its purpose and the amount of time needed to complete it. Certificates of participation in the research were provided to the teachers in exchange for completing the questionnaires. The selection criteria for inclusion in this study were a primary or preschool level of teaching. All participants were involved voluntarily and gave their written informed consent before completing the questionnaire.

### Measures

*Teacher burnout.* Given the pandemic context, the socio-contextual teacher burnout inventory (STBI, Pietarinen et al., 2013) has been used for measuring teacher burnout. This nine-item (e.g., "with this work pace, I do not think I will make it to the retiring age") scale was evaluated based on a Likert scale that ranged from one (completely disagree) to seven (completely agree). The established three constructs were teacher exhaustion, cynicism toward the teacher community, and inadequacy in the pupil-teacher relationship. The Cronbach's alpha for the entire scale was 0.90 (95% CI [0.89, 0.91]), and for its dimensions: exhaustion - 0.84 (95% CI, [0.93, 0.95]), cynicism - 0.85 (95% CI [0.84, 0.97]) and inadequacy - 0.84 (95% CI, [0.93, 0.95]).

*Well-being.* The well-being of teachers was measured with the well-being subscale from the trait emotional intelligence questionnaire-short form for adults (TEIQue-ASF; Petrides, 2009). This scale consists of 30 items evaluated on a Likert scale from one (completely disagree) to seven (completely agree), in which items (e.g., "I generally do not find life enjoyable.") measure emotional intelligence under four aspects: well-being, self-control, emotionality, and sociability. A high internal consistency was indicated by the 0.90 Cronbach's  $\alpha$  of this research (95% CI, [0.88, 0.91]). The Cronbach's  $\alpha$  for the well-being subscale was 0.80 (95% CI, [0.75, 0.85]).

*Self-control.* The self-control of teachers was measured using the self-control subscale from the TEIQue-ASF; Petrides, 2009). This subscale is composed of six items (e.g., "I usually find it difficult to regulate my emotions.") The Cronbach's  $\alpha$  for the well-being subscale was 0.83 (95% CI, [0.82, 0.85]).

*Positive emotionality.* The positive emotionality of the teachers was measured with the emotionality subscale from the TEIQue-ASF; Petrides, 2009)]. This subscale contained eight items (e.g., "Expressing my emotions with words is not a problem for me."). The Cronbach's  $\alpha$  for the emotionality scale was 0.94 (95% CI, [0.93, 0.95]).

*Educator roles.* We represented the pedagogical and content-related aspects of the teaching role, focusing on KERP (Kolb et al., 2014). KERP is a self-assessment tool that includes items related to an individual teaching role, beliefs about teaching and learning, goals for the educational process, and instructional practices (Kolb et al., 2014). KERP included 30 items that are forced-choice types of four educator roles: (1) facilitator (e.g., I aim for learners to develop a lifelong love of learning), (2) expert in the subject matter (e.g., I share my subject matter knowledge and expertise), (3) evaluator/standard setter (e.g., I use tests to evaluate the understanding of a subject by learners), and (4) coach (e.g., I believe learning occurs best in a real-life context). The Cronbach's  $\alpha$  for the subscales was as follows: facilitator was equal to 0.83 (95% CI, [0.82, 0.85]), expert was equal to 0.63, (95% CI, [0.62, 0.65]), evaluator was equal to 0.57 (95% CI, [0.56, 0.59]), and coach was equal to 0.72 (95% CI, [0.71, 0.74]).

### Statistical Analysis

A two-step cluster analysis with the Euclidean measure and the Akaike information criterion (AIC) was used to explore the possible profiles in our sample. This technique has advantages compared to more traditional clustering procedures (Kent et al., 2014). In it, the number of clusters is based on statistical measures of fit [AIC or BIC, average silhouette (an indicator of cohesion and separation), and ratio of sizes (largest cluster to smallest cluster)] and atypical values of analyses (i.e., outliers). The principle of parsimony was followed in the model selection criteria. According to these criteria, the best cluster solution was the one with the lowest AIC value. A good level fit (cutoff > 0.5) was highlighted by the average silhouette coefficient, and a cutoff < 2.0 in the case of the ratio of sizes, as recommended by Kent et al. (2014). Using the best cluster solution allows for measuring the improvement of homogeneity within each cluster and the heterogeneity between the clusters from one cluster to  $n + 1$  cluster by adding one cluster at each step. One-way ANOVA tests were performed to verify the differences in the indicators of the clusters between the distinct profiles, the association between profile membership, and Kolb's educator roles. Also, a multinomial logistic regression was used to calculate the predictive roles of the sociodemographic variables (e.g., gender, education level, urban/rural education, and professional experience) on profile membership.

## Results

### Step 1: Preliminary analysis – descriptive statistics and correlations

The descriptive statistics for demographic characteristics, depending on the level of burnout, are shown in Table 1. The means, SD, univariate normality coefficients, and correlation matrix are presented in Table 2.

Before conducting the two-step cluster analysis, two assumptions were verified. The first assumption regarding the independence of the variables included in the cluster model was satisfied (as shown in Table 2), considering the cutoff criterion ( $r < 0.70$ ), as suggested by Nunnally (1994). The second assumption, related to the univariate normality of all the indicators of the profiles, was also met. As shown in Table 2, the cutoff criteria recommended in the literature (skewness  $< 2$ ; kurtosis  $< 7$ ) (West et al., 1995) were not exceeded.

### Step 2: Cluster analysis (RQ1)

Identifying the Number of Profiles

Inspecting the graph of AIC created by autoclustering

(see Figure 1), we found multiple solutions ranging from two to four clusters. We minimized the AIC, but not at the cost of the other fit index, which is the measure of cohesion and separation (average silhouette coefficient).

The best solution was the model with two clusters. As the number of clusters increased, there was a decrease in the fit criteria model (i.e., the reduction of the silhouette coefficient and the ratio sizes), despite the decrease in AIC values (Table 3).

### Characteristics of the identified profiles

The first cluster ( $n = 199$ ; 60.3%) from our analysis was the “high psychological resources, no burnout risk” profile. It included teachers with higher scores on well-being, self-control, and positive emotionality, accompanied by the lowest scores on burnout. This meant no risk of burnout (see Table 3). The second cluster ( $n = 131$ ; 39.7%) was the “moderate psychological resources, mild burnout risk” profile. Teachers belonging to this profile had medium scores on well-being, self-control, and positive emotionality, combined with a mild risk of developing burnout.

**Table 1**

*Sociodemographic Variables and Descriptive Statistics, Depending on the Burnout Risk of the teachers.*

Sociodemographic Variables		Burnout risk		Total
		No risk	Moderate level	
Gender	Male	139	107	246
	Female	44	40	84
Teaching level	Preschool	60	48	108
	Primary	123	99	122
Place	Urban	124	93	217
	Rural	59	54	113
Professional Experience (Years)	<2	12	3	15
	2–5	30	6	36
	6–10	48	15	63
	11–20	30	54	84
	>20	63	69	132

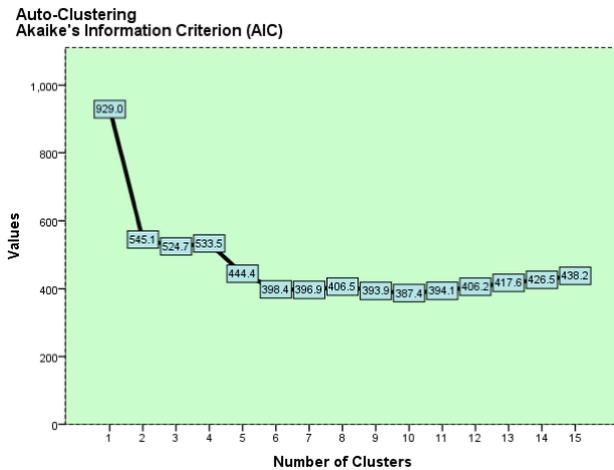
**Table 2**

*Means, SD, Univariate Normality Coefficients, And Correlation Matrix*

Clusters' indicators	Mean (SD)	Skewness (Std. Err)	Kurtosis (Std. Err)	1	2	3	4
Well-being	5.44(0.95)	-0.04(134)	-1.10(268)	—			
Self-control	4.70(0.87)	0.64(134)	-0.01(268)	.42**	—		
Positive emotionality	4.74(0.99)	0.08(134)	-0.72(268)	.59**	.43**	—	
Burnout	33.65(13.53)	-0.03(134)	-1.01(268)	.52**	.50**	.53**	—

\*\* $p < 0.01$ .

**Figure 1**  
Auto-Clustering According to Akaike's Information Criterion (AIC).



**Table 3**  
The Goodness of Fit Indicators in the Mode

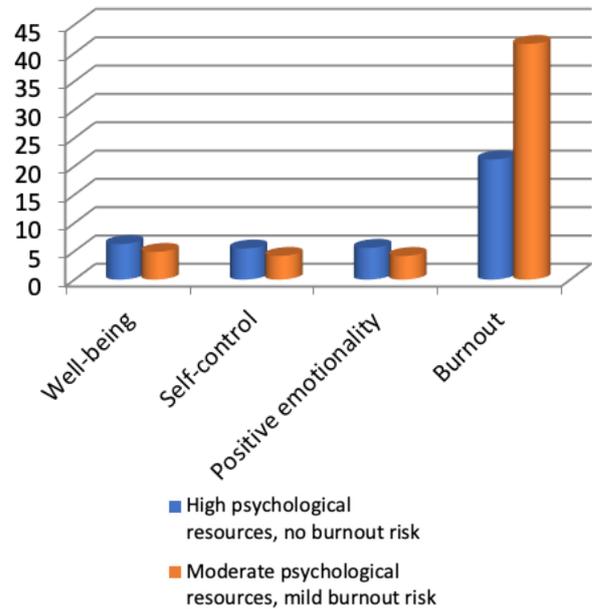
Number of Clusters	Average Silhouette	Akaike's Information Criterion (AIC)	Ratio of sizes
2	0.5	545.1	1.52
3	0.4	524.7	4.75
4	0.4	533.5	11.40

**Table 4**  
Means and SD of the Indicators of the Profiles Across Two Clusters

Indicators of the Profiles	Cluster 1	Cluster 2
	High Psychological Resources, No Burnout Risk	Moderate Psychological Resources and Mild Burnout Risk
Well-being	6.28(0.57)	4.90(0.73)
Self-control	5.50(0.72)	4.19(0.49)
Positive Emotionality	5.61(0.67)	4.18(0.73)
Burnout	21.23(8.57)	41.61(9.53)

Several one-way ANOVAs were conducted to examine the differences in the level of the indicators of the clusters between the two profiles. Significant differences for all indicators were revealed by the results. In the first cluster, higher scores emerged for: (1) well-being (Welch  $F_{1,315,569} = 369.148; p < 0.001$ ), (2) self-control (Welch  $F_{1,203,969} = 327.813; p < 0.001$ ), (3) positive emotionality (Welch  $F_{1,290,987} = 331.206; p < 0.001$ ), and (3) lower score for teacher burnout (Welch  $F_{1,293,652} = 406.369; p < 0.001$ ).

**Figure 2**  
Indicators of the Profiles (means) Across the Two Clusters



Step 3: Cluster analysis and teacher variables

Association between profile membership and sociodemographic variables (RQ2)

The association between profile membership and sociodemographic variables (e.g., gender, teaching level, urban/rural education, and professional experience) was examined using multinomial logistic regression. According to the results, gender ( $b = 0.07, SE = 0.276, Wald = 0.07, p = 0.791$ ), teaching level ( $b = 0.27, SE = 0.261, Wald = 1.11, p = 0.296$ ), and urban-rural education ( $b = 0.17, SE = 0.249, Wald = 0.49, p = 0.482$ ) were not significant predictors in the model. Instead, professional experience played a significant predictive role [ $b = 0.41, SE = 0.10, Wald = 17.09, p < 0.001; OR = 1.51, 95\% CI (1.24, 1.89)$ ]. Overall, the following patterns were shown in the results. Men and women were not predominantly represented in one of the two profiles. In other words, no gender differences were found in terms of distribution in the two clusters. The same pattern was found for teachers in rural or urban education. Even in the case of those working in preschool and primary education, no statistically significant differences were observed between the two profiles. However, concerning professional experience, professionals with less experience (less than one year and up to ten years), i.e., the youngest and most familiar with the digital environment, were less likely to belong to the mild profile and more likely to belong to the high mental health profile (Figure 3). An opposite pattern was found in the case of teachers with the highest levels of experience. They were more likely to belong to the "moderate psychological resources and mild burnout" risk profile and less likely to belong to the other.

### Association between profile membership and Kolb's educator roles (RQ3)

The results obtained from various one-way ANOVAs provided evidence for a significant association between profiles and Kolb's educator roles, i.e., (1) facilitator role ( $F_{1,328} = 120.347$ ;  $p < 0.001$ ), (2) expert role ( $F_{1,328} = 80.921$ ;  $p < 0.001$ ), and (3) coach role ( $F_{1,328} = 10.291$ ;  $p < 0.001$ ), except for the evaluator role ( $F_{1,328} = 2.911$ ;  $p = 0.089$ ). Cluster one had a significantly higher number for the facilitator role ( $M = 8.67$ ,  $SD = 1.786$ ) than cluster two ( $M = 6.01$ ,  $SD = 2.358$ ). In contrast, cluster two had a significantly higher number for the expert role ( $M = 8.92$ ,  $SD = 2.782$ ) than cluster one ( $M = 6.12$ ,  $SD = 2.701$ ). The same pattern was highlighted for the coach role—a higher number for cluster two ( $M = 9.04$ ,  $SD = 3.255$ ) than cluster one ( $M = 7.90$ ,  $SD = 3.021$ ). As mentioned, for the evaluator role, no significant differences were found (cluster one:  $M = 7.09$ ,  $SD = 2.376$ ; cluster two:  $M = 6.57$ ,  $SD = 2.898$ ).

### Discussion

In the coronavirus pandemic context, teacher burnout has become a global epidemic (Pressley, 2021) and a significant concern in the educational debate, both for practitioners and professionals and psychologists and experts in educational policy. The main aim of this research was to identify protective factors and the risk of burnout profiles of the teachers in the framework of Kolb's experiential learning theory (Kolb et al., 2014). We also explored associations between profile membership and sociodemographic variables on the one hand and Kolb's educator roles on the other. Two different profiles were revealed by the two-step cluster analysis.

The "high psychological resources, no burnout risk" included teachers with higher scores on well-being, self-control, positive emotionality, and no burnout risk. Teachers who perceive and express emotions show empathy, build good relationships, and master their emotions, impulsiveness, and stressful feelings. Therefore, these teachers are more protected against burnout symptoms. Their increased self-esteem, happiness, and optimism are also beneficial resources that help them manage stressors (Petrides & Furnham, 2001; Răducu & Stănculescu, 2022). Our results align with previous research highlighting the relationship between well-being and burnout (Akbari & Tavassoli, 2011; Bakioğlu & Kiraz, 2019; Ferradás et al., 2019; Schoeps et al., 2021; Tikkanen et al., 2017). More specifically, the cluster of "high psychological resources, no burnout risk" included teachers who showed minimal scores on the burnout scale, meaning, in fact, no risk of burnout. They found resources to protect themselves in an adverse context for which no one was prepared. Their dispositional traits, meaning self-control, positive emotionality, and well-being, contributed to buffering the negative impact of stressors.

The "moderate psychological resources, mild burnout risk" included teachers with medium scores on well-being, self-control, positive emotionality, and mild burnout risk. In this regard, teachers who were less skillful in perceiving and expressing emotions, showing empathy, building good relationships, and mastering their emotions, impulsiveness, and stressful feelings were more likely to experience burnout symptoms (Akbari & Tavassoli, 2011; Mérida-López & Extremera, 2017; Pishghadam & Sahebjam, 2012). Their low self-esteem, happiness, and increased pessimism make them far more vulnerable to work-related stressors (Răducu & Stănculescu, 2022). Even if "moderate psychological resources, mild burnout risk" teachers reported symptoms of burnout, exhaustion, cynicism toward the teacher community, and inadequacy in the pupil-teacher relationship, this does not mean that they fulfill the clinical burnout criteria. Still, this means they have an increased risk of developing it.

These findings are in line with previous studies, in which it has been shown that emotional resources are strong predictors of teacher burnout (Kumara, 2021; Martínez-Monteağudo et al., 2019; Mérida-López & Extremera, 2017). However, the previous research on teacher burnout was expanded by the results, showing more refined socio-contextualized differences in teacher prevention burnout profiles in terms of well-being, self-control, and positive emotionality.

The results imply a variation in teaching roles and professional experience among teachers. Some of the teachers seemed to prefer specific teaching roles that were less burdensome. It was shown by the results that the teacher protective burnout profiles differed primarily in their preferred teaching role. The teachers characterized by a facilitator role were more likely to be assigned to the "high psychological resources, no burnout risk" profile. This alignment may be because the facilitator teaching role has produced the highest average values in the online exams of students (Agustino & Pertivi, 2020). On the other hand, our findings emphasize that the teachers included in the second cluster, i.e., "moderate psychological resources, mild burnout risk," had a higher score on expert and coach educator roles. The coach teaching role was previously proven to be the most appropriate role in one-on-one teaching for students with the lowest mean grades in the pandemic context (Agustino & Pertivi, 2020). Nonetheless, the possibility of practice in online learning classrooms is limited and highly restrained. Second, concerning the expert role, the results align with previous studies. In those studies, this role was revealed to be the least engaging and inaccessible in the opinions of students related to online teaching (Syahrin & Salih, 2020).

Therefore, experts were expected to feel more stress due to the difficulty of capturing and maintaining

the attention of students. In this regard, the present research has enriched the gap in the literature concerning the link between teaching roles as a protective factor against burnout. It was shown that the facilitator teaching role that helps learners contact their personal experience and reflect on it is the least stressful for online teaching (Răducu & Stănculescu, 2021). At the same time, experts and coaches were more stressed regarding online teaching. This may be because the purpose of the expert is to help learners organize and connect their reflections to the knowledge base of the subject matter through lectures and texts in a reflective-authoritative role (Kolb et al., 2014). These strategies may be less interesting and engaging for students. Second, the interest of the coach was to help learners apply knowledge to achieve their goals (Kolb et al., 2014). Still, this role—as is described in ELT—is more appropriate for one-on-one learning and in a remote environment. This strategy is almost impossible to use with every student. The evaluator teaching role was relatively equally represented in both profiles. Within Kolb's theory framework, this role involves setting standards of performance and structuring performance activities. The role of an evaluator teacher consists of the use of tests, assessments, and projects. Nonetheless, a personal relationship with the student was not created because the teacher focused on the subjects and evaluation. It was shown previously that the role of the evaluator teacher facilitated online learning among students from higher education (Agustino & Pertiwi, 2020). Still, it is required that learning should be more concrete, practical, and instructional and less often evaluated through tests and assignments in preschool and primary school education.

Additionally, a significant association between profile membership and professional experience was shown in the overall results. Teachers with less professional experience were more likely to belong to the "high psychological resources, no burnout risk" profile, and members of the profile "moderate psychological resources, mild burnout risk" were more likely to be experienced teachers. This may seem to contradict previous studies (Pyhältö et al., 2020) relating high levels of professional experience to a low risk of burnout. However, considering that the pandemic context created new stressors, such as technostress and a lack of resources and administrative support (Pressley, 2021; Răducu & Stănculescu, 2022; Wang & Li, 2019), the situation seems to have changed. Consequently, these results may align with the latest studies suggesting experienced and self-confident teachers in face-to-face teaching. In such conditions, these teachers may suddenly become deskilled when transitioning to online teaching, experiencing disempowerment, vulnerability, and frustration in using remote technology (Hämäläinen et al., 2021; Rahayu & Wirza, 2020). At the same time, openness

to new technology, confidence, and increased digital competences (Lucas et al., 2021) could protect younger teachers from burnout symptoms.

This study contributes to expanding the empirical body of research on teacher burnout (Mojsa-Kaja et al., 2015; Pietarinen et al., 2021; Pozo-Rico et al., 2020). This study is one of the first studies to explore the individual traits of teachers in terms of personal resources and burnout risk profiles within the framework of Kolb's experiential learning theory (Kolb et al., 2014). The results showed that the well-being, self-control, and positive emotionality of teachers help them buffer work-related stressors in online teaching in the COVID-19 pandemic context. Moreover, the higher these internal resources were, the lower the risk of experiencing burnout. This highlights that emotional resources represent a strong internal barrier against imminent stressors and that preparing functional psychological strategies can prevent burnout syndrome. Our results also indicated that preferred teaching roles and professional experience are related to burnout risk. At the same time, the most protective role against burnout is the facilitator role. Expert and coach roles were associated with a mild burnout risk profile. The fewer years of teaching experience, the lower the burnout risk of teachers in an online teaching context. Accordingly, the most protected teachers in the pandemic context are those with the facilitator role, high well-being, self-control, and positive emotionality. At the same time, most at-risk teachers have expert and coach roles, with moderate levels of well-being, self-control, and positive emotionality. Another contribution of this study is based on a person-centered approach, meaning the two-step cluster analysis. We proved that there were no simple associations between the research variables. We found associations between the profile of distinct teachers and their predictors in terms of professional experience and Kolb's educator roles.

Moreover, this study brings constructs from the educational sphere, in contrast with previous studies that investigated the burnout profile of teachers only from the health psychology angle (Ferradás et al., 2019; Pyhältö et al., 2020; Salmela-Aro et al., 2019; Tikkanen et al., 2017). Therefore, two different perspectives were reunited into a new point of view on the burnout of teachers.

Thus, this study had two main educational implications. First, the need of teachers for the professional and personal development of emotional competencies to help them manage stress in the classroom in both normal and adverse educational, social, and health contexts was emphasized in this study. Second, teachers were encouraged by the theoretical framework of ELT to move away from the

consistent expert teaching role to the coach role. The teacher imposes an objective, results-oriented approach on young learners in the expert role. In the coach teaching role, the teacher works on a one-to-one approach to apply the learning concepts to the facilitator teaching role. This role uses a worm-affirmative role and promotes “inside-out” learning to draw out motivation and self-knowledge, creating personal relationships and dialogue with the students.

Regarding the limitations of this study, it is essential to note that a correlational design was employed, limiting our ability to infer causal links. Additionally, the current findings cannot be generalized due to the convenience sampling method used. Considering that most of the respondents were women, they were slightly overrepresented in the sample. In future studies, longitudinal designs are necessary to capture the possible developmental trajectories of burnout, in line with the theoretical assumption underlying protective factors. In those studies, factors like dispositional traits and coping strategies, and covariates, such as educator roles and digital literacy skills, should be considered in the context of technostress.

## Conclusion

The new demands on the current education system have caused teachers to juggle three different teaching approaches: social distancing in classes, online teaching, and hybrid teaching. In this context, the short- and long-term impacts of the COVID-19 pandemic on preschool and primary education have led to increased levels of burnout among teachers (Pressley, 2021; Sokal et al., 2020). It has been shown in this study that the teachers who were less protected against the burnout profile during the adverse context of the COVID-19 pandemic were those with moderate levels of well-being, self-control, and positive emotionality. Additionally, teachers who preferred expert and coach educator roles were also protected against burnout. In contrast, the most protected against burnout were those with high levels of well-being, self-control, positive emotionality, and the advantages of the facilitator role in interacting with students. The results can be helpful for teacher training specialists. With such knowledge, it will be possible to help teachers cope with online teaching stressors, regulate their emotional resources, and use effective and less consuming teaching strategies specific to the facilitator role. The need to improve the digital skills of teachers must also be considered to facilitate and streamline their work (Harriott & Kamei, 2021). As all organizations must promote the health of their employees, in the case of teachers, educational managers must support the health and well-being of teachers. This may be done by creating good working conditions and developing programs to equip teachers with the emotional competency and coping strategies necessary, both in typical educational contexts and in

adverse social and health conditions, as were those observed during the COVID-19 pandemic.

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