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# Teacher profiles based on burnout symptoms: Differences between educational stages and relationship with adaptive psychological functioning

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## ARTICLE INFO

## ABSTRACT

On the premise that burnout is a heterogeneous phenomenon in terms of the symptoms people experience, a growing number of studies in recent years have aimed to identify symptomatic profiles of burnout in teachers. The present study analyzes possible differences in the make-up of profiles of burnout symptoms in teachers working in initial and middle educational stages, as well as teachers working in both stages at the same time. It also seeks to determine whether those profiles differ in terms of adaptive psychological functioning (flourishing, self-efficacy, hope, optimism, and resilience). From a sample of 1,290 teachers ($M_{age}$ = 43.04, $SD$ = 13.13, 73.7% women), two profiles were found (with and without burnout) in early and middle school teachers, and four profiles in teachers who work in both stages (three profiles of burnout symptoms). Those with profiles of burnout symptoms exhibited significantly poorer psychological functioning. These findings allow to identify those teachers who, due to their burnout symptoms, need priority attention in order to reinforce their positive organizational behavior.

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## Perfiles docentes basados en su sintomatología de *burnout*: diferencias entre etapas educativas y relación con el funcionamiento psicológico adaptativo

## RESUMEN

Bajo la premisa de que el *burnout* constituye un fenómeno heterogéneo en la experimentación de sus síntomas, en los últimos años, un número creciente de trabajos se ha orientado hacia la identificación de perfiles sintomáticos de *burnout* en el profesorado. En el presente estudio, se analizan las diferencias en la conformación de los perfiles de síntomas de *burnout* en docentes de etapas educativas iniciales y medias, así como en docentes que simultanean ambas etapas. Asimismo, se analiza si los perfiles identificados difieren en su funcionamiento psicológico adaptativo (florecimiento, autoeficacia, esperanza, optimismo y resiliencia). A partir de una muestra de 1.290 docentes ($M_{edad}$ = 43.04, $DT$ = 13.13, 73.7% mujeres), se identifican dos perfiles (con y sin *burnout*) en las etapas inicial y media, y cuatro perfiles (tres perfiles con sintomatología de *burnout*) en el profesorado que ejerce en ambas etapas. Los perfiles con síntomas de *burnout* evidencian un funcionamiento psicológico significativamente más pobre. Estos hallazgos permiten identificar al profesorado que, en virtud de su sintomatología de *burnout*, requieren una atención prioritaria en aras de potenciar su funcionamiento organizacional positivo.

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## Introduction

Burnout in teachers is currently the subject of significant interest due to its high prevalence (García-Carmona et al., 2019) and its harmful impact on teachers' health (Esteras et al., 2019) and performance—e.g., lower organizational engagement (Hakanen et al., 2006), reduced self-efficacy (Skaalvik & Skaalvik, 2010), poorer quality of teaching (Pellerone et al., 2020), intentions to give up teaching (Madigan & Kim, 2021b). These consequences also affect students, and it is not surprising that teacher burnout is associated with greater conflict in the classroom (Aloe et al., 2014), lower levels of perceived support and intrinsic motivation (Shen et al., 2015), and worse academic performance (Madigan & Kim, 2021a). The Job Demands and Resources model (JD-R; Schaufeli & Taris, 2014) offers a broadly accepted explanatory framework of burnout in the teaching context (Granziera et al., 2021). According to the model, burnout is a syndrome that is the product of prolonged imbalance between the demands of the job and the personal and contextual resources to cope with those demands, progressively undermining physical and psychological health. In contrast, having sufficient resources would buffer the impact of job demands and boost adaptive functioning, encouraging teachers' engagement.

Burnout manifests through three symptoms: emotional exhaustion, depersonalization, and a lack of personal accomplishment (Maslach et al., 1996). Emotional exhaustion brings with it chronic fatigue and a lack of physical and mental energy to deal with day-to-day demands. Depersonalization is characterized by apathy and negative attitudes towards others in the workplace. A lack of personal accomplishment reflects the feelings of being unable to do significant or quality work. The three symptoms are relatively independent (Skaalvik & Skaalvik, 2010), and not everybody experiences all of them (García-Carmona et al., 2019). Given that, in recent years there has been a drive towards studying profiles of teacher burnout (Kalamara & Richardson, 2022; Pyhältö et al., 2021; Salmela-Aro et al., 2019), the assumption being that teachers could be differentiated quantitatively (high or low levels of burnout) and qualitatively (high scores in some symptoms, low in others) by how they experience the syndrome. Each profile is associated with different work-related and health related consequences, which means that identifying them would help in the design of more specific interventions (Leiter & Maslach, 2016).

Research has identified a range of different profiles, with teachers exhibiting high scores in the three burnout symptoms, in two, and in a single symptom. There are various reasons for this inconsistency. Some studies have looked at profiles only made up of the three burnout symptoms (Kalamara & Richardson, 2022; Martínez et al., 2020). Others, however, have included inadequate teacher-student interaction (Pyhältö et al., 2021), absence of enthusiasm for the job, or guilt (Guidetti et al., 2018) as manifestations of the syndrome. Moreover, some studies have examined the symptom profiles of burnout in secondary school teachers (Kalamara & Richardson, 2022; Martínez et al., 2020) or infant and primary school teachers (Herman et al., 2018), while others have looked at primary and secondary school teachers together (Guidetti et al., 2018; Pyhältö et al., 2021). This is no small issue, as teacher burnout seems to be related to the specific demands of the job in each educational stage. In earlier educational stages, burnout is related to workload, time pressures, and disruptive student behavior (Rajendran et al., 2020; Skaalvik & Skaalvik, 2017). In secondary education, there is a greater impact of loss of social status, a mismatch with organizational values, and poor student motivation (Buunk et al., 2007; Skaalvik & Skaalvik, 2017). However, some teachers work in different educational stages at the same time, teaching different student groups. This makes it hard to develop deep links with the students, increasing the risk of burnout (Pellerone et al., 2020; Pietarinen et al., 2013; Saloviita & Pakarinen, 2021).

## The present study

Based on the studies reviewed, the educational stage may be a differential factor in the make-up of teacher profiles of burnout symptoms. Hence, the primary objective of the present study was to identify these profiles in teachers working in the initial educational stages (infants and primary school) and the middle stages (compulsory secondary education and *Bachillerato* [optional higher secondary education]), as well as those working in both stages at the same time. Despite the novel nature of the study, we hypothesized more accentuated burnout profiles in the middle stages (high and moderate levels in the three symptoms). In addition, we hypothesized qualitatively more varied profiles (high levels in one, two, or three burnout dimensions) in teachers working in both stages simultaneously.

The second objective was to examine whether the profiles differed in terms of adaptive psychological functioning. The emphasis on positive teacher functioning comes from the growth in positive organizational psychology, on the premise that mental wellbeing is key to effective, productive workplaces (Di Fabio, 2017). Psychological capital and flourishing are considered exemplars of adaptive organizational functioning (Luthans et al., 2015; Zwetsloot & Pot, 2004). Psychological capital is a state of positive psychological development characterized by high levels of self-efficacy, optimism, hope, and resilience (Luthans et al., 2015). These four attributes encourage teacher engagement, motivation, performance, and wellbeing (Vizoso-Gómez, 2020). Flourishing, conceptualized as a paradigm of living well (enjoyment, pleasures, satisfaction) and the full development of individual potential (Huppert & So, 2013), is associated with less intention to give up teaching, and better teacher performance and engagement with the job (Marais-Opperman et al., 2021; Redelinghuys et al., 2019).

In line with the aforementioned JD-R model, teachers' adaptive psychological functioning is threatened by burnout. Hence one may expect that teacher profiles with the three burnout symptoms would show significantly lower levels of flourishing, self-efficacy, optimism, hope, and resilience than profiles without all three symptoms. We hypothesized that these differences would be even more striking, the lower the levels of burnout and the fewer symptoms in the identified profiles. The effects of sex and years of experience were controlled for in this study, given that men are more prone to depersonalization (Skaalvik & Skaalvik, 2017) and new teachers are more prone to burnout in general (Pyhältö et al. 2021).

## Method

### Participants

The study was performed in Galicia (Spain), in which there are 32,989 teachers teaching infant education (children aged 3-6), primary education (age 6-12), compulsory secondary education (age 12-16), and *Bachillerato* (age 16-18). A convenience sample of 1,294 teachers was selected from that population (3.92%). Four participants were excluded for not identifying which educational stage they taught. The final sample comprised 1,290 teachers (73.3% women; $M_{age}$ = 43.04, $SD$ = 13.13). The distribution by educational stage was as follows: initial ($n$ = 398, 84.7% women); middle ($n$ = 570, 67.2% women); both stages simultaneously ($n$ = 322, 72% women). In terms of professional experience, six participants (0.47%) had less than one year's experience, 192 (14.88%) had between one and five years' experience, 126 (9.77%)

had between five and ten years', 361 (27.98%) had between 10 and 20 years', 381 (29.53%) had between 20 and 30 years', and 224 (17.37%) had more than 30 years' experience.

### Instruments

*Burnout* was measured using the Spanish validation (Seisdedos, 1997) of the *Maslach Burnout Inventory-Educators Survey* (MBI-ES; Maslach et al., 1996). This instrument measures three dimensions: *emotional exhaustion* (nine items), *depersonalization* (five items), and *personal accomplishment* (eight items). Responses are given on a Likert-type scale between 0 (Never) and 6 (Every day). The reliability and validity coefficients in this study were: *emotional exhaustion* ($\alpha$ = .903; $\omega$ = .906, 95% CI [.898, .913]; CR = .906; AVE = .523); *depersonalization* ($\alpha$ = .618; $\omega$ = .634, 95% CI [.603, .664]; CR = .633; AVE = .393); *personal accomplishment* ($\alpha$ = .832; $\omega$ = .831, 95% CI [.817, .845]; CR = .832; AVE = .510).

*Psychological capital* was measured using the *CapPsi Scale* (Omar et al., 2014), via its Spanish validation (García-Bértoa et al., 2019). This assesses the four indicators of psychological capital (self-efficacy, hope, optimism, and resilience; four items each), scored on a Likert-type scale between 1 (strongly disagree) and 5 (strongly agree). The dimensions gave the following coefficients for reliability and validity in the present study: *self-efficacy* ($\alpha$ = .813; $\omega$ = .815, 95% CI [.799, .832]; CR = .820; AVE = .538); *hope* ($\alpha$ = .844; $\omega$ = .844, 95% CI [.830, .858]; CR = .853; AVE = .594); *optimism* ($\alpha$ = .703; $\omega$ = .712, 95% CI [.687, .737]; CR = .767; AVE = .487); *resilience* ($\alpha$ = .670; $\omega$ = .671, 95% CI [.642, .699]; CR = .702; AVE = .451).

*Flourishing* was measured using the Spanish validation (Pozo et al., 2016) of the *Flourishing Scale* (Diener et al., 2010). This has eight items, scored on a Likert-type scale from 1 (completely disagree) to 5 (completely agree). The coefficients of reliability and validity for the instrument in the present study were: $\alpha$ = .878; $\omega$ = .880, 95% CI [.871, .890]; CR = .880; AVE = .501.

### Procedure

Contact was first made by email with all of the schools registered on the Galician regional government website as teaching initial and middle educational stages. The email indicated the objectives of the study and the terms of participation (voluntary, anonymous, confidential), and asked the schools to forward the information to their teachers. It also included a link to an online form containing all of the items from the measuring instruments, the instructions for completing them, and a document for informed consent, in conformance with the ethical guidelines in the Declaration of Helsinki and from the University of A Coruña (code 27/02/2019). There was no time limit for completing the form, which took, on average, around nine minutes.

### Data analysis

The validity and reliability of the measuring instruments were determined using Cronbach's $\alpha$, McDonald's $\omega$, Composite Reliability (CR), and Average Variance Extracted (AVE) coefficients. In general, values of $\alpha$, $\omega$, and CR above .70 and values of AVE above .50 are suggested to be adequate (Hair et al., 2011; Kalkbrenner, 2021).

The participant sample was subdivided into three subsamples: initial, middle, and both educational stages. The preliminary analysis consisted of calculating descriptive statistics (mean, standard deviation, asymmetry and kurtosis) for the variables and their (Pearson) correlations. The teacher profiles were determined via latent profile analysis (LPA). This is a statistical technique from the person-centered approach framework, which assumes the existence of latent population subgroups that are internally similar

with respect to a set of observable variables, differentiated from other subgroups (Ferguson et al., 2020). Compared to other techniques that follow a similar approach (e.g., cluster analysis), LPA gives a more accurate classification system, based on a probabilistic method for identifying the optimal model of groups (profiles) from various parameters of fit. The participants are assigned to each group based on the criteria of the probability of them belonging to that group (Aflaki et al., 2022).

The following criteria were used to select the optimal number of profiles: (Nylund-Gibson & Choi, 2018): fit indicators (Akaike Information Criterion, AIC; Schwarz Bayesian Information Criterion, BIC; BIC Adjusted for the Sample Size, SSA-BIC; Vuong–Lo–Mendell–Rubin Likelihood Ratio Test, VLMRT; and the Lo–Mendell–Rubin Likelihood Ratio Test of Model Fit, LMR), entropy, a posteriori probability coefficients, parsimony, and conceptual consistency of the groups identified. In addition, differences between the profiles in the burnout dimensions were calculated. Solutions with the lowest values of AIC, BIC, and SSA-BIC indicate the best fit, but the fundamental criteria are achieving significant values ($p \leq .05$) for VLMRT and LMR. In addition, values of entropy > .80 and a posteriori probability coefficients > .70 indicate adequate model accuracy when classifying each case in a given profile.

In each subsample, the differences between the profiles in indicators of adaptive functioning (*flourishing, self-efficacy, hope, optimism,* and *resilience*) were calculated using MANCOVA. *Sex* and *years of teaching experience* were taken as covariables. The effect size was determined using the partial eta squared statistic and *d* statistic (Cohen, 1988): null effect ($\eta_p^2$ < 0.01, $d \leq 0.09$); small ($\eta_p^2$ = 0.01–0.058, $d$ = 0.10–0.49); moderate ($\eta_p^2$ = 0.059–0.137, $d$ = 0.50–0.79); large ($\eta_p^2 \geq 0.138$, $d \geq 0.80$). The LPA was performed using MPlus 8.5 software (Muthén & Muthén, 1998–2020), the other analyses were performed using SPSS 26.0 (IBM Corp, 2019).

## Results

### Preliminary analysis

The results of the descriptive and correlational analysis for the three subsamples are shown in Table 1 (initial stage), Table 2 (middle stage), and Table 3 (both stages). The burnout dimensions were negatively correlated in the three subsamples with the indicators of *psychological capital* and with *flourishing* ($p \leq .001$, in each case). There was an exception in the subsample of teachers working in both educational stages, in which *depersonalization* and *self-efficacy* were not significantly correlated ($r = –.10$, $p = .08$).

### Profiles of burnout symptoms in initial education stages

The fit of various models was assessed (Table 4) and the analysis was stopped at the three-profile solution based on two criteria: (a) although the values of AIC, BIC, and SSA-BIC were slightly lower in the three-profile model than the two-profile model, the non-significant values of VLMRT ($p = .18$) and LMR ($p = .19$) in the three-profile model indicated that this model did not have a better fit than the model with two profiles; (b) the value for entropy in the two-profile model (.874) was clearly better than the three-profile model (.742). The a posteriori probability coefficients in the two-profile model were close to 100% (.976 and .915). In addition, the differences between the two profiles in the burnout dimensions were significant: *emotional exhaustion*, $t(396) = –8.352$, $p < .001$, $d = 1.20$; *depersonalization*, $t(396) = –27.762$, $p < .001$, $d = 1.60$; *personal accomplishment*, $t(396) = 6.164$, $p < .001$, $d = 0.65$. The effect was large for the first two dimensions, and moderate in *personal accomplishment*.

**Table 1**
Descriptive statistics and correlations in the subsample of teachers working in initial stages of education ($n = 398$)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. EME | – | | | | | | | |
| 2. DEP | .38** | – | | | | | | |
| 3. PAC | −.39** | −.32** | – | | | | | |
| 4. SEF | −.35** | −.18** | .53** | – | | | | |
| 5. HOP | −.37** | −.24** | .61** | .54** | – | | | |
| 6. OPT | −.37** | −.20** | .60** | .52** | .71** | – | | |
| 7. RES | −.30** | −.19** | .53** | .61** | .41** | .47** | – | |
| 8. FLO | −.37** | −.31** | .53** | .51** | .53** | .54** | .50** | – |
| *M* | 2.16 | 0.68 | 4.66 | 3.81 | 4.26 | 4.44 | 4.08 | 4.30 |
| *SD* | 1.20 | 0.76 | 0.81 | 0.63 | 0.64 | 0.61 | 0.54 | 0.58 |
| *Asymmetry* | 0.68 | 1.38 | −0.60 | −0.45 | 0.66 | −0.93 | −0.47 | −1.14 |
| *Kurtosis* | 0.08 | 1.59 | 0.42 | 0.66 | 0.66 | 0.98 | 0.27 | 2.64 |

*Note.* EME = Emotional Exhaustion; DEP = Depersonalization; PAC = Personal Accomplishment; SEF = Self-efficacy; HOP = Hope; OPT = Optimism; RES = Resilience; FLO = Flourishing; **$p < .001$.

**Table 2**
Descriptive statistics and correlations in the subsample of teachers working in middle stages of education ($n = 570$)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. EME | – | | | | | | | |
| 2. DEP | .43** | – | | | | | | |
| 3. PAC | −.47** | −.43** | – | | | | | |
| 4. SEF | −.32** | −.26** | .55** | – | | | | |
| 5. HOP | −.43** | −.28** | .56** | .51** | – | | | |
| 6. OPT | −.40** | −.37** | .56** | .57** | .66** | – | | |
| 7. RES | −.31** | −.31** | .54** | .68** | .35** | .51** | – | |
| 8. FLO | −.39** | −.40** | .54** | .52** | .58** | .62** | .48** | – |
| *M* | 2.48 | 1.08 | 4.21 | 3.74 | 3.92 | 4.25 | 4.03 | 4.16 |
| *SD* | 1.31 | 0.99 | 0.90 | 0.65 | 0.86 | 0.69 | 0.55 | 0.60 |
| *Asymmetry* | 0.42 | 1.32 | −0.44 | −0.53 | −0.92 | −0.97 | −0.54 | −1.02 |
| *Kurtosis* | −0.50 | 2.10 | 0.37 | 0.85 | 0.54 | 1.09 | 0.56 | 1.93 |

*Note.* EME = Emotional Exhaustion; DEP = Depersonalization; PAC = Personal Accomplishment; SEF = Self-efficacy; HOP = Hope; OPT = Optimism; RES = Resilience; FLO = Flourishing; **$p < .001$.

**Table 3**
Descriptive statistics and correlations in the subsample of teachers working in both stages of education ($n = 322$)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. EME | – | | | | | | | |
| 2. DEP | .40** | – | | | | | | |
| 3. PAC | −.35** | −.37** | – | | | | | |
| 4. SEF | −.24** | −.10 | .47** | – | | | | |
| 5. HOP | −.33** | −.21** | .60** | .49** | – | | | |
| 6. OPT | −.32** | −.21** | .58** | .55** | .70** | – | | |
| 7. RES | −.34** | −.18** | .61** | .62** | .44** | .54** | – | |
| 8. FLO | −.36** | −.23** | .52** | .51** | .54** | .63** | .53** | – |
| *M* | 2.41 | 0.92 | 4.41 | 3.79 | 4.09 | 4.33 | 4.08 | 4.20 |
| *SD* | 1.33 | 0.89 | 0.89 | 0.62 | 0.76 | 0.68 | 0.59 | 0.58 |
| *Asymmetry* | 0.42 | 0.95 | −0.31 | −0.30 | −0.89 | −1.10 | −0.64 | −0.83 |
| *Kurtosis* | −0.66 | 0.06 | −0.43 | 0.37 | 0.91 | 1.01 | 0.85 | 0.84 |

*Note.* EME = Emotional Exhaustion; DEP = Depersonalization; PAC = Personal Accomplishment; SEF = Self-efficacy; HOP = Hope; OPT = Optimism; RES = Resilience; FLO = Flourishing; **$p < .001$.

**Table 4**
Indicators of fit and classification accuracy for each model

| | | AIC | BIC | SSA-BIC | VLMRT | LMR | Entropy |
|---|---|---|---|---|---|---|---|
| Initial stages | 2 classes | 2968.910 | 3008.775 | 2977.044 | 188.362* | 180.812* | .874 |
| | 3 classes | 2934.866 | 2990.676 | 2946.254 | 42.044 | 40.359 | .742 |
| Middle stages | 2 classes | 4789.290 | 4832.746 | 4801.000 | 275.041** | 264.616** | .884 |
| | 3 classes | 4703.930 | 4764.769 | 4720.325 | 93.360 | 89.821 | .661 |
| | 2 classes | 2661.465 | 2699.211 | 2667.492 | 155.911** | 149.441** | .809 |
| Both stages | 3 classes | 2609.594 | 2662.438 | 2618.032 | 59.871* | 57.386* | .845 |
| | 4 classes | 2575.259 | 2643.201 | 2586.107 | 42.335* | 40.579* | .833 |
| | 5 classes | 2553.508 | 2636.548 | 2566.767 | 29.751 | 28.517 | .871 |

*Note.* AIC = Akaike Information Criterion; BIC = Schwarz Bayesian Information Criterion; SSA-BIC = BIC adjusted for the sample size; VLMRT = Vuong–Lo–Mendell–Rubin likelihood ratio test; LMR = Lo–Mendell–Rubin likelihood ratio test of model fit; *$p < .01$. **$p < .001$.

**Table 5**
Description of the identified profiles

| | Profiles | M | SE | Confidence intervals | |
|---|---|---|---|---|---|
| | | | | Lower 5% | Upper 5% |
| Initial stages | *No burnout (n = 326)* | | | | |
| | Emotional exhaustion | 1.94 (−0.31) | 0.06 (0.81) | 1.84 | 2.05 |
| | Depersonalization | 0.40 (−0.56) | 0.05 (0.45) | 0.32 | 0.48 |
| | Personal accomplishment | 4.79 (0.43) | 0.05 (0.84) | 4.71 | 4.86 |
| | *Burnout (n = 72)* | | | | |
| | Emotional exhaustion | 3.14 (0.82) | 0.30 (1.13) | 2.65 | 3.64 |
| | Depersonalization | 1.94 (1.73) | 0.13 (0.76) | 1.73 | 2.15 |
| | Personal accomplishment | 4.12 (−0.66) | 0.15 (1.02) | 3.87 | 4.36 |
| Middle stages | *No burnout (n = 507)* | | | | |
| | Emotional exhaustion | 2.25 (−0.06) | 0.07 (0.93) | 2.14 | 2.36 |
| | Depersonalization | 0.82 (−0.08) | 0.05 (0.75) | 0.74 | 0.90 |
| | Personal accomplishment | 4.35 (−0.07) | 0.05 (0.91) | 4.27 | 4.42 |
| | *Burnout (n = 63)* | | | | |
| | Emotional exhaustion | 4.05 (1.38) | 0.24 (0.87) | 3.66 | 4.44 |
| | Depersonalization | 2.89 (2.38) | 0.25 (0.95) | 2.48 | 3.30 |
| | Personal accomplishment | 3.19 (−1.33) | 0.18 (1.04) | 2.91 | 3.48 |
| Both stages | *Moderate burnout (n = 90)* | | | | |
| | Emotional exhaustion | 2.57 (0.14) | 0.18 (0.75) | 2.28 | 2.86 |
| | Depersonalization | 1.41 (0.52) | 0.12 (0.43) | 1.22 | 1.61 |
| | Personal accomplishment | 3.96 (−0.44) | 0.13 (0.95) | 3.74 | 4.18 |
| | *High burnout (n = 44)* | | | | |
| | Emotional exhaustion | 3.77 (1.11) | 0.28 (0.71) | 3.32 | 4.23 |
| | Depersonalization | 2.61 (1.88) | 0.12 (0.50) | 2.41 | 2.82 |
| | Personal accomplishment | 3.88 (−0.59) | 0.16 (0.99) | 3.62 | 4.14 |
| | *No burnout (n = 156)* | | | | |
| | Emotional exhaustion | 1.58 (−0.63) | 0.08 (0.62) | 1.45 | 1.71 |
| | Depersonalization | 0.31 (−0.68) | 0.05 (0.34) | 0.22 | 0.39 |
| | Personal accomplishment | 4.80 (0.48) | 0.07 (0.81) | 4.69 | 4.92 |
| | *High exhaustion (n = 32)* | | | | |
| | Emotional exhaustion | 4.33 (1.67) | 0.19 (0.52) | 4.00 | 4.63 |
| | Depersonalization | 0.43 (−0.57) | 0.07 (0.36) | 0.28 | 0.57 |
| | Personal accomplishment | 4.27 (−0.10) | 0.17 (0.90) | 3.99 | 4.54 |

*Note.* The figures in brackets are the normalized mean scores (z).
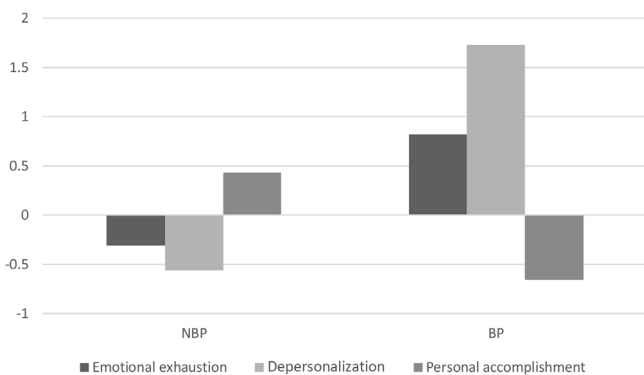


**Figure 1.** Graphical representation of teacher burnout symptom profiles (initial stages of education).
*Note.* NBP = No Burnout Profile; BP = Burnout Profile.

Table 5 and Figure 1 show that the first profile (*n* = 326, 81.91%) exhibited moderately low levels of *emotional exhaustion* and *depersonalization*, and moderately high levels of *personal accomplishment.* This group was labelled the *No Burnout Profile* (NBP). The second profile (*n* = 72, 18.09%) exhibited high levels of *emotional exhaustion* and *depersonalization*, and low levels of *personal accomplishment* and was labelled the *Burnout Profile* (BP).

*Profiles of burnout symptoms in middle education stages*

The values for VLMRT, LMR, and entropy (Table 4) indicated that the two-profile solution had a better fit than the three-profile solution. In addition, the a posteriori probability coefficients were close to 100% (.974 and .928). The differences between the two profiles were large and significant in the three burnout dimensions: *emotional exhaustion*, $t(568) = -11.643$, $p < .001$, $d = 1.84$; *depersonalization*, $t(568) = -23.943$, $p < .001$, $d = 2.24$; *personal accomplishment*, $t(568) = 10.138$, $p < .001$, $d = 1.25$. The scores from the two profiles (Table 5; Figure 2) show a first group (*n* = 507, 88.95%) with very moderate scores (around zero when normalized) in the three burnout dimensions, which suggests a *No Burnout Profile* (NBP). The second group (*n* = 63; 11.05%) exhibited high scores in *emotional exhaustion* and *depersonalization*, and low scores in *personal accomplishment*, and was labelled *Burnout Profile* (BP).

*Profiles of burnout symptoms in teachers working in both educational stages*

The non-significant values for VLMRT (*p* = .15) and LMR (*p* = .16) in the five-profile model indicated that this solution had a worse fit than the model with four profiles (see Table 4). In addition, there were two almost identical groups in the five-profile model, indicating that the four-profile solution was more parsimonious. Three other indicators confirmed the suitability of the four-profile model: (a) a high entropy value (.833); (b) a posteriori probability coefficients above 80% (.888, .937, .933 and .824); (c) (large) significant differences between the four profiles in the burnout dimensions: *emotional exhaustion*, $F(3, 318) = 156.637$, $p < .001$, $\eta_p^2 = .596$; *depersonalization*, $F(3, 318) = 566.048$, $p < .001$, $\eta_p^2 = .842$; *personal accomplishment*, $F(3, 318) = 29.218$, $p < .001$, $\eta_p^2 = .216$.

Looking at the scores (Table 5, Figure 3), the four profiles were as follows: a first group (*n* = 90, 27.95%) with moderately high levels of *emotional exhaustion* and *depersonalization*, and moderately low levels of *personal accomplishment* (*Moderate Burnout Profile*, MPB). A second group (*n* = 44, 13.66%) with similar characteris-
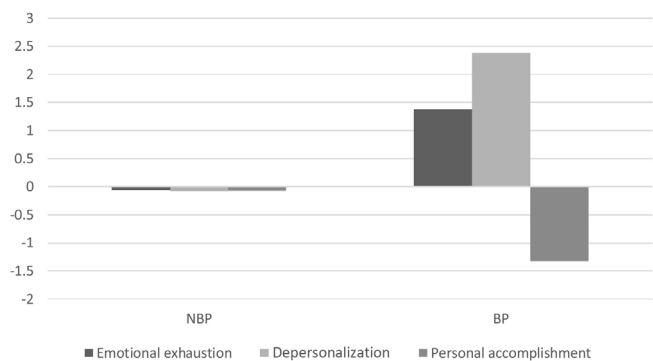
**Figure 2.** Graphical representation of teacher burnout symptom profiles (middle stages of education).
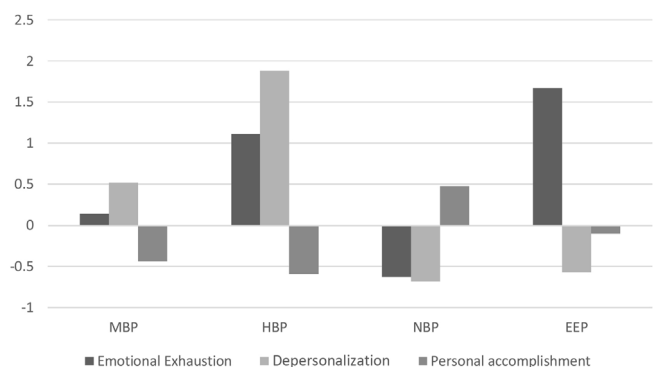*Note:* NBP = No Burnout Profile; BP = Burnout Profile.



**Figure 3.** Graphical representation of teacher burnout symptom profiles (teachers working in initial and middle educational stages at the same time).
*Note.* MBP = Moderate Burnout Profile; HBP = High Burnout Profile; NBP = No Burnout Profile; EEP = Emotional Exhaustion Profile.

tics but more extreme levels (*High Burnout Profile,* HBP). The third group (*n* = 156, 48.45%) exhibited low levels of *emotional exhaustion* and *depersonalization*, and moderately high levels of *personal accomplishment* (*No Burnout Profile,* NBP). The fourth group (*n* = 32, 9.94%) exhibited high levels of *emotional exhaustion*, but low levels of *depersonalization* and moderately low levels of *personal accomplishment* (*Emotional Exhaustion Profile,* EEP).

*Differences between the profiles in adaptive psychological functioning*

In the initial educational stages (Table 6), the NBP teachers had significantly higher scores than BP teachers in the five indicators of adaptive psychological functioning: *flourishing, F*(396) = 42.750, *p* < .001, $\eta_p^2$ = .098; *self-efficacy, F*(396) = 11.866, *p* ≤ .001, $\eta_p^2$ = .029; *hope, F*(396) = 25.360, *p* < .001, $\eta_p^2$ = .060; *optimism, F*(396) = 18.006, *p* < .001, $\eta_p^2$ = .044; *resilience, F*(396) = 9.807, *p* = .002, $\eta_p^2$ = .024. The effect sizes were moderate in *flourishing* and *hope*, and small in the other dimensions. In terms of the covariables, *years of experience* demonstrated a significant effect, which was small in *flourishing, F*(3, 394) = 6.145, *p* = .014, $\eta_p^2$ = .015; *self-efficacy, F*(3, 394) = 3.995, *p* = .046, $\eta_p^2$ = .010; and *hope, F*(3, 394) = 9.603, *p* = .002, $\eta_p^2$ = .024, with higher scores the more experienced the teacher. The effect of *sex* was not significant.

In the middle stages (Table 6), the NBP teachers had significantly higher scores in the five indicators of adaptive psychological functioning: *flourishing, F*(568) = 76.795, *p* < .001, $\eta_p^2$ = .119; *self-efficacy, F*(568) = 40.202, *p* < .001, $\eta_p^2$ = .066; *hope, F*(568) = 48.476, *p* < .001, $\eta_p^2$ = .079; *optimism, F*(568) = 57.583, *p* < .001, $\eta_p^2$ = .092; and *resilience, F*(568) = 55.980, *p* < .001, $\eta_p^2$ = .090. The size of the

effect was moderate in each case. With regard to the covariables, there was a significant effect of *years of experience* in *resilience, F*(4, 565) = 7.446, *p* = .007, $\eta_p^2$ = .013 and *hope, F*(4, 565) = 35.912, *p* < .001, $\eta_p^2$ = .060, with a small and moderate effect, respectively. For *resilience,* there were higher scores the more experienced the teachers, for *hope,* there was the opposite pattern. *Sex* also demonstrated a small, significant effect in *resilience, F*(568) = 4.525, *p* = .034, $\eta_p^2$ = .008; *hope, F*(568) = 6.599, *p* = .010, $\eta_p^2$ = .012; and *self-efficacy, F*(568) = 4.815, *p* = .029, $\eta_p^2$ = .008. Men scored higher in *resilience* and *self-efficacy*, women scored higher in *hope*. There were significant differences between the profiles of teachers working in both educational stages in the five variables of adaptive functioning: *flourishing, F*(3, 318) = 13.369, *p* < .001, $\eta_p^2$ = .113; *self-efficacy, F*(3, 318) = 4.567, *p* = .004, $\eta_p^2$ = .042; *hope, F*(3, 318) = 12.540, *p* < .001, $\eta_p^2$ = .106; *optimism, F*(3, 318) = 10.260, *p* < .001, $\eta_p^2$ = .089; *resilience, F*(3, 318) = 11.597, *p* < .001, $\eta_p^2$ = .099. The effect size was moderate in each case, except for *self-efficacy*, where it was small.

As Table 6 shows, the NBP teachers had higher scores in the five variables. In *flourishing*, the NBP teachers exhibited moderate differences from the MBP group (*d* = 0.61, 95% CI [0.35-0.88]), and large differences with the EEP (*d* = 0.80, 95% CI [0.41-1.18]) and HBP (*d* = 0.86, 95% CI [0.52-1.21]) groups. There were similar results in *hope*, with moderate differences between the NBP and MBP profiles (*d* = 0.57, 95% CI [0.31-0.83]), and large differences between NBP and the EEP (*d* = 0.84, 95% CI [0.45-1.23]) and HBP (*d* = 0.84, 95% CI [0.49-1.18]) profiles. In *optimism* and *resilience*, there were moderate differences between the NBP profile and the two groups with burnout: *optimism*, NBP-MBP (*d* = 0.62, 95% CI [0.36-0.89]), NBP-HBP (*d* = 0.63, 95% CI [0.37-0.90]); *resilience*, NBP-MBP (*d* = 0.69, 95% CI [0.35-1.03]), NBP-HBP (*d* = 0.62, 95% CI [0.28-0.96]). The differences between the NBP and EEP profiles were large in *resilience* (*d* = 0.86, 95% CI [0.47-1.25]) and moderate in *optimism* (*d* = 0.77, 95% CI [0.38-1.16]). In *self-efficacy*, the differences between the NBP profile and the others were only significant for the MBP and EEP profiles. The differences were small in the first case (*d* = 0.43, 95% CI [0.16-0.69]), and moderate for EEP (*d* = 0.53, 95% IC [0.15-0.92]). The differences between the MPB, HBP, and EEP profiles were not significant.

With regard to the covariables, there was a small significant effect for *years of experience* on *resilience, F*(4, 317) = 4.343, *p* = .038, $\eta_p^2$ = .014; and *hope, F*(4, 317) = 9.720, *p* = .002, $\eta_p^2$ = .030. There was a progressive increase in *resilience* as teachers had more *years of experience*, with the opposite pattern for *hope*. There was a small, significant effect for *sex* on *hope, F*(320) = 5.302, *p* = .022, $\eta_p^2$ = .017, with women scoring higher.

## Discussion

The results indicate that the teachers' profiles of burnout symptoms differ to some extent according to the educational stages they teach in, although not exactly in line with our hypothesis. For teachers in initial and middle stages of education, we identified one profile with three burnout symptoms (BP). Based on the JD-R model, those with this profile would lack the personal and contextual resources to deal with job demands, which would lead them to feeling burnt out at work. This profile has also been identified in previous studies in both educational stages (Herman et al., 2018; Martínez et al., 2020), which seems to confirm teacher burnout as a global phenomenon (García-Arroyo et al., 2019). In the present study, the percentage of teachers making up the BP group was higher in the initial educational stages (18%) than in the middle stages (11%) (*z* = 3.11, *p* < .01). Although there is still some discussion about which of the stages exhibits greater prevalence of burnout (e.g., Kim et al., 2019; Saloviita & Pakarinen, 2021), this

**Table 6**
Means and standard deivations in adaptive psychological functioning according to the teacher burnout symptom profiles

| | Profiles | Indicators of adaptive psychological functioning | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | | Flourishing | Self-efficacy | Hope | Optimism | Resilience |
| Initial stages | NBP | 4.38 (0.54) | 3.85 (0.62) | 4.33 (0.60) | 4.50 (0.57) | 4.12 (0.52) |
| | BP | 3.92 (0.64) | 3.59 (0.62) | 3.94 (0.71) | 4.18 (0.68) | 3.90 (0.57) |
| Middle stages | NBP | 4.23 (0.54) | 3.80 (0.61) | 4.01 (0.79) | 4.33 (0.63) | 4.08 (0.52) |
| | BP | 3.55 (0.74) | 3.29 (0.74) | 3.21 (1.03) | 3.63 (0.86) | 3.58 (0.63) |
| | MBP | 4.09 (0.51) | 3.66 (0.62) | 3.96 (0.72) | 4.16 (0.68) | 3.93 (0.57) |
| Both stages | HBP | 3.93 (0.68) | 3.73 (0.67) | 3.78 (0.78) | 4.11 (0.81) | 3.93 (0.70) |
| | NBP | 4.40 (0.50) | 3.92 (0.59) | 4.33 (0.66) | 4.53 (0.54) | 4.27 (0.50) |
| | EEP | 3.97 (0.66) | 3.60 (0.64) | 3.74 (1.02) | 4.07 (0.85) | 3.82 (0.59) |

*Note.* MBP = Moderate Burnout profile; HBP = High Burnout Profile; NBP = No-Burnout Profile; EEP = Emotional Exhaustion Profile. Standard deviations are given in parentheses.

finding may be explained by the work-related demands specifically associated with the syndrome in each stage. In this regard, other studies (Kokkinos, 2007; Skaalvik & Skaalvik, 2017) have noted excessive workload, time pressures, and disruptive student behavior as the most important predictors of teacher burnout, factors that seem to have a greater impact in the initial stages of education (Rajendran et al., 2020; Skaalvik & Skaalvik, 2017).

Three profiles of burnout symptoms were identified in teachers working in both educational stages simultaneously. Two of those profiles included the three indicators of the syndrome, at high (HBP) or moderate (MBP) levels, while the third profile (EEP) highlighted emotional exhaustion. Although, a priori, the relationship between EEP and burnout was weaker than the relationship for the other two profiles, high scores in a single burnout dimension may indicate a transitional state on the way to developing the syndrome (Maslach & Leiter, 2008). In fact, emotional exhaustion is often a gateway to the other symptoms (Leiter & Maslach, 2016). Given that, the EEP group should also be given priority for attention. Although we do not have prior studies which have examined the makeup of profiles based on the three burnout symptoms in teachers working in both educational stages at the same time, there are various reasons that may explain the greater presence of symptoms in this group. On the one hand, teaching both stages involves dealing with more groups and school years, making it harder to develop significant relationships with students (Pietarinen et al., 2013). Distant student-teacher relationships have been associated with experiencing burnout (Pellerone et al., 2020; Saloviita & Pakarinen, 2021). In addition, these teachers have to deal with the specific contextual factors related to burnout in each stage—e.g., excessive workload and disruptive students in initial stages, and low student motivation in middle stages (Buunk et al., 2007; Rajendran et al., 2020; Skaalvik & Skaalvik, 2017). This high volume of demands, in the absence of resources to deal with them, as the JD-R model outlines, would precipitate burnout.

In addition to the profiles linked to the syndrome, a profile without burnout symptoms (NBP) was identified in the three subsamples (initial, middle, and both stages). In line with other studies that have reported similar profiles (e.g., Kalamara & Richardson, 2022; Salmela-Aro et al., 2019), these are teachers who are highly engaged with their work. This engagement may be related to greater availability of personal resources, which allow them to buffer the impact of job demands and boost high performance (Granziera et al., 2021). In fact, this asymptomatic teacher profile is associated with resources such as resilience (Salmela-Aro et al., 2019), self-efficacy (Herman et al., 2018), self-esteem (Méndez et al., 2020) and enthusiasm (Guidetti et al., 2018). Although this characterization fits the NBP groups identified in teachers in initial educational stages and those working in both stages, the NBP group in the middle stages may be slightly different. That profile does not exhibit emotional exhaustion or depersonalization, but nor does it exhibit personal accomplishment. This seems consistent with the profile of engaged-burnout identified by Salmela-Aro

et al. (2019), made up of engaged teachers with some early burnout symptoms. These teachers may have fewer personal resources for dealing with job demands, as other studies that identified similar profiles have also indicated (Méndez et al., 2020; Salmela-Aro et al., 2019), and are more vulnerable to burnout. Future studies should therefore examine the long-term progression of the NBP in middle educational stages to determine exposure to the syndrome.

In terms of the adaptive psychological functioning in each of the identified profiles, both in initial and middle educational stages, the BP groups exhibited significantly lower levels of flourishing, self-efficacy, hope, optimism, and resilience than their asymptomatic colleagues (NBP). There was a similar pattern in teachers working in both stages together. The three symptomatic burnout profiles (MBP, HBP, and EEP) presented significantly poorer psychological functioning that the NBP (with the exception of a lack of difference in self-efficacy between the NBP and HBP groups). It is perhaps a surprise that the lowest levels of psychological capital and flourishing were in the EEP group. This might be explained by their high levels of emotional exhaustion (notably higher than the MBP and HBP groups), if one considers that dimension to be at the core of burnout (Skaalvik & Skaalvik, 2020).

These findings have important psycho-educational implications. Assuming that the relationship between demands-resources and burnout is reciprocal (Schaufeli & Taris, 2014), flourishing and psychological capital may be adaptive resources in the face of teacher burnout, as other studies have suggested (Marais-Opperman et al., 2021; Vizoso-Gómez, 2020). This conclusion is also consistent with studies that, based on the JD-R model, report an inverse relationship between personal resources and teacher burnout (Corso-de-Zúñiga et al., 2020; Dicke et al., 2018). There have been recent initiatives promoting psychological capital (Kalman & Summak, 2017) and teacher flourishing through the development of positive learning contexts (Owen, 2016) and training in emotional skills (Mérida-López & Extremera, 2020) in which teachers have gained renewed passion and engagement with their work. The results of our study suggest that interventions aimed at developing flourishing and psychological capital may be particularly effective in teachers who, according to their burnout symptom profiles, need priority attention. These interventions may be more beneficial if flourishing and psychological capital are worked on together, taking advantage of the synergy between resources (Galindo-Domínguez et al., 2020).

This study does have some limitations. The design does not allow causality to be established between the teacher burnout symptom profiles and adaptive psychological functioning. In addition, although the sample was large, the sampling procedure does not guarantee that it was representative of the population. Another limitation is the AVE coefficients for some subscales, which, while close, did not reach the criteria of .50. This was particularly so in the MBI *depersonalization* dimension, whose psychometric properties have been questioned in multiple studies with non-English-speaking samples (Olivares & Gil-Monte, 2009).

Future studies could confirm the validity of the conclusions from the present study using other instruments (e.g., *Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo*, CESQT; Gil-Monte, 2019). Other studies may also consider the influence of variables such as school type (private/public) and setting (urban/rural) or class sizes. Another potential line of research may be the relationship between teacher burnout profiles and personality traits, given the weight of this variable in explaining the syndrome (Kim et al., 2019).

*Conclusions*

This study contributes to the characterization of profiles of teachers with burnout symptoms in initial and middle educational stages, as well as teachers working in both stages at the same time. It shows that all of the symptomatic profiles exhibit worse adaptive psychological functioning than asymptomatic teachers, meaning they need priority psycho-educational attention. On a more positive note, the study confirms that in all educational stages, there were teachers who were not affected by burnout who had high levels of self-efficacy, optimism, resilience, and flourishing. These indicators may be effective resources for mitigating the effect of job demands and boosting teacher engagement.

## Acknowledgements

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