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# Teacher Profiles of Psychological Capital and Their Relationship with Burnout

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**Abstract:** This study adopts a person-centered approach to identify the possible existence of different teacher profiles of psychological capital, according to the way in which its four components combine (efficacy, hope, optimism, and resilience). The study aimed to examine whether the identified profiles differed in their levels of burnout. In total, 1379 non-university teachers participated in the study. A latent profile analysis was performed using MPlus 7.11 software. Seven teaching profiles of psychological capital were identified, differing both quantitatively and qualitatively. The differences between the profiles in burnout were estimated using SPSS 26 software. Teachers with a profile of low psychological capital (i.e., low confidence of successfully completing challenging tasks—efficacy; lack of energy for establishing personal goals and working towards achieving them—hope; little tendency to make positive causal attributions and develop expectations of success—optimism; and low capacity to recover or emerge stronger from adverse situations—resilience) exhibited significantly higher levels of burnout. The lowest levels of burnout were found in the profile of high psychological capital (i.e., higher in efficacy, hope, optimism, and resilience). These results suggest that teachers who can muster the four components of psychological capital are more protected against burnout.

**Keywords:** psychological capital; burnout; occupational health; teachers; profiles

## 1. Introduction

Research into burnout has shown a high prevalence in teachers [1–3], who are one of the professional groups most prone to suffer from it [4,5]. There is generally a broad consensus characterizing burnout as a syndrome in which three groups of symptoms are present: Emotional exhaustion, depersonalization, and reduced personal accomplishment at work [6]. Emotional exhaustion refers to a feeling of being overwhelmed or emotionally saturated in response to a perceived inability to face workplace demands. Depersonalization is the development of attitudes and behaviors marked by indifference, apathy, coldness, and an impersonal, distant, or even cynical manner with others involved in the individual's professional activity. Reduced personal accomplishment brings with it feelings of being ineffective at work, not achieving success at work, and intense desires to change jobs.

Burnout appears in response to chronic exposure to workplace stress [7] as a result of the interaction of diverse contextual and individual factors [8]. Among the main factors are an excessive workload, not enough time to do it, disruptive student behavior, bureaucratic responsibilities, and a lack of support from superiors [9–11]. Individual or personal factors that have been associated with burnout

include the adoption of maladaptive coping strategies [12], insufficient emotional resources [13,14], and a personality with a tendency towards neuroticism [15].

### *1.1. Sustainable Working Conditions: The Role of Psychological Capital in Its Relationship with Burnout*

In view of its significant impact on health [16,17], interventions for burnout have traditionally focused on the reduction or elimination of those factors (both personal and work-related) that might have brought on or sustained the syndrome in workers. In recent years, however, this predominantly reactive approach has been progressively replaced by a more proactive perspective, focusing on the promotion and development of healthy organizations [18]. This novel approach is framed by what is called the psychology of sustainability and sustainable development [19]. In fact, the psychology of sustainability and sustainable development encompasses not only environmental or socio-economic questions, but also the health and wellbeing of human beings, in line with the United Nations' sustainable development goals [20]. From this consideration, and assuming that the workplace environment is one of the main drivers for the development of healthier societies [19], the promotion of worker wellbeing becomes a key factor for their own sustainability, growth, and productivity [21], thus promoting the prevention of workplace-associated pathologies [22]. The influence of this optimizing perspective has been specifically felt in the study and application of personal strengths and psychological capabilities that can be measured, developed, and effectively managed to improve worker wellbeing and performance in the workplace [23,24].

While looking to specify the psychological resources that meet the standards of positive organizational behavior—i.e., consistency with the principles of positive psychology, a solid conceptual and empirical foundation, valid, reliable measurement, open to change and development, associations with desirable workplace attitudes, behaviors, and performance—Luthans, Youssef, and Avolio [25] coined the term psychological capital representing the state of positive individual psychological development characterized by: (a) Confidence in one's ability to make the necessary efforts to succeed in challenging tasks (efficacy); (b) perseverance in the pursuit of set goals, and the ability to redirect plans when obstacles to reaching desired goals appear (hope); (c) positive attributions about current performance and positive expectations of future success (optimism); and (d) the ability to recover and progress to success in adverse situations, emerging from them stronger (resilience).

The proliferation of research in the last 10 years on this topic indicates that psychological capital yields significant benefits in attitude and behavior in the workplace, related to better satisfaction, involvement, and performance [26–29]. There is evidence that psychological capital contributes significantly to improvement in workers' psychological health [30–32], and is related to suffering fewer pathologies, including burnout [33–35].

While this research on psychological capital has largely focused on non-educational organizational environments, the high levels of burnout in teachers has led to growing interest in studying the role of teachers' psychological capital in suffering from this syndrome. Some studies have indicated that psychological capital may constitute a negative predictor of teacher burnout, acting as a mediator of variables, such as job satisfaction [36], subjective wellbeing [31], or emotional expression [37]. Similarly, other studies have concluded that the negative relationship between psychological capital and burnout would contribute to improved teacher performance [38] and increased job satisfaction [39]. In short, existing research suggests that psychological capital equips teachers with effective resources that are negatively related to the symptomatology associated with burnout (i.e., emotional exhaustion, depersonalization, reduced personal accomplishment).

### *1.2. The Current Study*

Up to now, the relationship between teacher psychological capital and burnout has been studied using a variable-centered approach. That approach implicitly assumes that each of the four components of psychological capital is additive, giving an overall score. According to that, a given population (in

this case, teachers) is homogeneous in the way that particular variables (e.g., efficacy, hope, optimism, resilience) operate on others (e.g., burnout) [40].

However, the four factors making up psychological capital have not only shown adequate convergent validity but also discriminant validity [25,27,41,42], such that it seems pertinent to assess the variance explained by each one of the four components individually. Some studies have called for research into the possible existence of subgroups of individuals who differ from each other in how the four factors combine (e.g., high scores in some, low scores in others), demonstrating different compositions (i.e., differentiated profiles) of psychological capital.

Given that, the first objective of this study is to adopt a person-centered approach to identify the existence of different profiles of teacher psychological capital. The few studies that exist have focused on occupational samples outside of the educational arena, and there is a certain diversity in the profiles identified. Bouckenoghe, De Clercq, and Raja [43] identified six profiles. Two of these (one predominated by low resilience, and one predominated by low optimism) exhibited qualitative differences in the combination of the constituents of psychological capital (high levels of some components and low levels of others), while the other four profiles differed quantitatively (profiles that combined the four components in similar levels—high, moderately high, moderate, and low). Djorouva, Rodríguez, and Lorente-Prieto [44] found three qualitatively different profiles of psychological capital (one profile high in resilience and optimism and low in efficacy and hope; one with the opposite profile; and a third that was high in hope, optimism, and resilience but low in efficacy), along with a fourth characterized by high levels of the four components. Couture [45] has recently identified four profiles of psychological capital, although in this case, solely with quantitative differences (profiles of high, medium-high, medium-low, and low psychological capital).

The heterogeneity of psychological capital profiles identified by the scant prior research, together with the fact that none of the research focused on teachers as a group, make it very difficult to establish a specific hypothesis about the expected profiles in this population. For this reason, the first objective is somewhat exploratory, although it is plausible to hypothesize at least the existence of some profiles of psychological capital that demonstrate qualitative differences in the combination of the four components, as well as the existence of some profiles that combine the four components to a similar degree (either high or low).

Our second objective is to examine whether the profiles of teacher psychological capital differ in how they experience burnout. This would allow the identification of groups of teachers who are vulnerable to a greater or lesser degree. Based on the work reviewed, which, from a variable-centered focus, has examined the relationship between psychological capital and burnout in teachers [31,36–39], we hypothesize that the profile with low levels of psychological capital (in the four components) will have higher scores for burnout, and in contrast, the profile with high psychological capital (high scores in the four components) will have the lowest indexes of burnout.

Similarly, various sociodemographic factors, such as gender, experience, and educational stage, have been related to teacher burnout. It seems that burnout manifests differently in men and women, such that men are more likely to experience depersonalization, and women are more likely to suffer from emotional exhaustion [46,47], while other research has found higher levels of depersonalization [48], emotional exhaustion, and reduced personal accomplishment [49] in women. The amount of professional experience seems to be a protective factor against burnout [50,51], while the syndrome is more prevalent in higher educational stages [16,52]. Consequently, these factors will be taken as covariables to statistically control for their effects.

## 2. Materials and Methods

### 2.1. Participants

The initial sample was made up of 1400 teachers, obtained by random sampling of different schools in the four provinces of Galicia (Spain). In total, 21 subjects were excluded for having a high

number (over 20%) of missing values. Another 16 cases had low levels of missing values, which were dealt with using the full information maximum likelihood (FIML) method using the MPlus 7.11 program [53].

The definitive participating sample comprised 1379 participants (1016 women, and 363 men), aged between 24 and 63 years old ( $M = 43.17$ ;  $SD = 13.21$ ). In terms of educational stages, 107 participants (7.8%) worked in infant education; 297 (21.5%) in primary education; 472 (34.2%) in compulsory secondary education; 127 (9.2%) in higher secondary education (the *bachillerato*, generally students aged 17 to 18); 11 (0.8%) in professional training; and 365 (26.5%) were teaching more than one stage at a time. In terms of experience, 6 participants (0.4%) had been teaching for less than one year; 204 (14.8%) between 1 and 5 years; 137 (9.9%) between 5 and 10 years; 386 (28%) between 10 and 20 years; 409 (29.7%) between 20 and 30 years; and 237 (17.2%) for more than 30 years.

## 2.2. Instruments

*Psychological capital.* We used the CapPsi Psychological Capital Scale [54]. This instrument has 16 items evaluating the four constituent factors of psychological capital: Efficacy (four items; e.g., “If I make the necessary effort, I can resolve difficult problems at work.”); hope (four items; e.g., “I have goals and aims at work that I hope to achieve.”); optimism (four items; e.g., “I look on the positive side of each work project I undertake.”); and resilience (four items; e.g., “I can overcome difficult times in my job because I have already been through difficulties.”). The four factors demonstrated appropriate internal consistency (resilience:  $\alpha = 0.70$ ; optimism:  $\alpha = 0.74$ ; efficacy:  $\alpha = 0.82$ ; hope:  $\alpha = 0.85$ ), in line with previous studies [55]. The responses were on a Likert-type scale from 1 (completely disagree) to 6 (completely agree). Scores closer to 6 in each of the components of psychological capital would indicate that the individual had a higher level of the characteristic being measured.

*Burnout.* This was evaluated using the Maslach Burnout Inventory-Educators Survey (MBI-ES) [6]. This 22-item questionnaire evaluates the three dimensions characterizing the syndrome: Emotional exhaustion (nine items; e.g., “I feel emotionally exhausted by my work”), depersonalization (five items; e.g., “I have become more insensitive towards people since I started teaching”), and personal accomplishment (eight items; e.g., “I think I deal effectively with my students’ problems”). In line with previous studies [56,57], internal consistency indices were:  $\alpha = 0.90$  in emotional exhaustion;  $\alpha = 0.62$  in depersonalization; and  $\alpha = 0.84$  in personal accomplishment. The survey uses a Likert-type response scale with scores ranging from 0 (never) to 6 (every day). Scores closer to six indicate a higher level of emotional exhaustion and depersonalization, while scores closer to zero indicate a lower level of personal accomplishment.

## 2.3. Procedure

Data collection was carried out in accordance with the ethical standards of the Ethics Committee of the University of A Coruña (Spain) (ethics code: 3 April 2018) [58], with written, informed consent from the participants as warranted by the Helsinki Declaration. Various schools in the four Galician provinces, selected at random, were contacted by email. The email stated the research objectives and included a link to a web platform containing the questionnaire items, along with instructions for completing them and the consent form. The schools were asked to distribute the information among the teachers to request their voluntary, anonymous participation, assuring them of the confidentiality of the information. The teachers who agreed to be part of the study completed the questionnaires via the web platform, without any time limits. The data was collected during January and February 2019.

## 2.4. Data Analysis

We performed a latent profile analysis (LPA) to determine the psychological capital profiles, using MPlus, version 7.11 [53]. This analysis allowed us to identify the latent categorical variables to group the participants together in classes (profiles), establishing which from a finite set of models had the best fit to the data.

The following parameters were considered as criteria to determine the optimum number of classes: The Akaike information criterion (AIC), the Schwarz Bayesian information criterion (BIC), the sample size adjusted BIC (SSA-BIC), the adjusted Lo–Mendell–Rubin maximum likelihood ratio test (LMRT) [59], the parametric bootstrap likelihood ratio test (PBLRT), and the size of the sample for each subgroup. The AIC, BIC, and SSA-BIC indices are descriptive, with lower values indicating a better model fit, whereas the LMRT and PBLRT indices allow a final decision to be made. The  $p$  value associated with LMRT and PBLRT, when significant, indicates that the solution with  $k$  classes has a better fit to the data than a solution with  $k-1$  classes.

In order to determine the classification accuracy of the selected model, we calculated the a posteriori probabilities and the entropy statistic. This statistic takes values between zero and one; the closer it is to one, the more accurate the classification. The final parameter used to evaluate the model was a MANOVA to analyze the differences between the classes in the criterion variables (efficacy, hope, optimism, and resilience). This was done using SPSS 26 software [60].

The differences between the identified profiles in terms of burnout (dependent variable) were estimated using MANCOVA. Gender, years of professional experience, and educational stage were taken as covariables. The effect size of the differences between groups was determined using partial eta squared and Cohen's  $d$  [61]: No effect:  $\eta_p^2 < 0.01$  ( $d < 0.09$ ); small:  $\eta_p^2 = 0.01$  to  $\eta_p^2 = 0.058$  ( $d = 0.10$ – $d = 0.49$ ); medium:  $\eta_p^2 = 0.059$  to  $\eta_p^2 = 0.137$  ( $d = 0.50$ – $d = 0.79$ ); and large:  $\eta_p^2 \geq 0.138$  ( $d \geq 0.80$ ).

### 3. Results

Table 1 gives the descriptive statistics and the Pearson correlations between the variables. The correlation matrix demonstrates that they are all statistically significant ( $p < 0.001$ ). Asymmetry and kurtosis data indicate that the variables exhibit a normal distribution. From a statistical point of view, the results of the Bartlett sphericity test show that the variables are sufficiently intercorrelated ( $\chi^2(21) = 3919.18$ ;  $p < 0.001$ ), which is important in order to be able to perform the subsequent multivariate analyses.

**Table 1.** Descriptive statistics and correlation matrix for the variables in the study.

|                  | 1       | 2       | 3       | 4       | 5       | 6       | 7     |
|------------------|---------|---------|---------|---------|---------|---------|-------|
| 1. EFI           | –       |         |         |         |         |         |       |
| 2. HOP           | 0.51 *  | –       |         |         |         |         |       |
| 3. OPT           | 0.55 *  | 0.69 *  | –       |         |         |         |       |
| 4. RES           | 0.64 *  | 0.39 *  | 0.52 *  | –       |         |         |       |
| 5. EXH           | –0.31 * | –0.39 * | –0.38 * | –0.31 * | –       |         |       |
| 6. DEP           | –0.20 * | –0.28 * | –0.30 * | –0.24 * | 0.41 *  | –       |       |
| 7. ACC           | 0.52 *  | 0.60 *  | 0.59 *  | 0.55 *  | –0.42 * | –0.41 * | –     |
| <i>M</i>         | 3.77    | 4.08    | 4.33    | 4.05    | 2.3     | 0.91    | 4.39  |
| <i>SD</i>        | 0.64    | 0.79    | 0.67    | 0.56    | 1.28    | 0.91    | 0.89  |
| <i>Asymmetry</i> | –0.47   | –1.02   | –1.06   | –0.65   | 0.51    | 1.31    | –0.48 |
| <i>Kurtosis</i>  | 0.71    | 1.06    | 1.17    | 1.05    | –0.39   | 1.90    | 0.23  |

Note: EFI = Efficacy; HOP = Hope; OPT = Optimism; RES = Resilience; EXH = Emotional Exhaustion; DEP = Depersonalization; ACC = Personal accomplishment. Measurement scale of psychological capital (1–6), high scores indicate higher levels of each construct component; Measurement scale of burnout (0–6), high scores indicate greater levels of emotional exhaustion and depersonalization, low scores indicate lower levels of personal accomplishment; \*  $p < 0.001$ .

#### 3.1. Identification of Profiles of Psychological Capital

The fit of various models of latent profiles were analyzed (ranging from two to eight classes). In adjusting the models, it was assumed that the variances could differ between the indicators within each group, with the restriction specified that they are equal between the groups. Similarly, a restriction was imposed of independence between the indicators, both within and between groups.



Table 2 shows the results of the model adjustment. It was stopped at eight classes, as a non-significant LMRT was obtained ( $LMRT = 55.709$ ;  $p > 0.05$ ). Looking at the remaining models, the seven-class model exhibits the best indicators of fit (LMRT and PBLRT statistically significant, and the lowest values for AIC, BIC, and SSA-BIC). The value of entropy for this model (0.831) suggests a high classification accuracy of the subjects to each class. This value is higher than the six- and five-class models, although slightly lower than the four- and three-class models. Nonetheless, considering all of the statistical parameters together, the seven-class model was chosen as the most appropriate. A MANOVA was performed to analyze the contribution of each of the variables making up the profile to the differentiation between classes. The results reinforce the aptness of the model, showing statistically significant differences between the seven classes in the four criterion variables: Efficacy ( $F(6,1372) = 288.109$ ;  $p < 0.001$ ;  $\eta_p^2 = 0.558$ ), hope ( $F(6,1372) = 292.360$ ;  $p < 0.001$ ;  $\eta_p^2 = 0.561$ ), optimism ( $F(6,1372) = 2174.860$ ;  $p < 0.001$ ;  $\eta_p^2 = 0.905$ ), resilience ( $F(6,1372) = 298.471$ ;  $p < 0.001$ ;  $\eta_p^2 = 0.566$ ). The effect size was large in all cases.

**Table 2.** Statistics for identifying the fit of the latent class models and the classification accuracy.

| Models of Profiles of Psychological Capital |             |               |              |              |             |               |               |
|---|-------------|---------------|--------------|--------------|-------------|---------------|---------------|
|   | Two Classes | Three Classes | Four Classes | Five Classes | Six Classes | Seven Classes | Eight Classes |
| AIC   | 9662.796    | 9092.791      | 8804.108     | 8655.833     | 8499.530    | 8447.265      | 8400.015      |
| BIC   | 9730.774    | 9186.915      | 8924.377     | 8808.248     | 8672.091    | 8645.971      | 8624.866      |
| SSA-BIC                                     | 9689.478    | 9129.736      | 8851.315     | 8713.303     | 8567.263    | 8525.260      | 8488.272      |
| Entropy                                     | 0.809       | 0.841         | 0.914        | 0.814        | 0.818       | 0.831         | 0.833         |
| LMRT  | 1378.320 ** | 564.391 *     | 290.642 *    | 154.014 *    | 161.826 *   | 160.435 *     | 55.709        |
| PBLRT                                       | 1416.453 ** | 580.005 **    | 298.683 **   | 158.275 **   | 166.303 **  | 164.874 **    | 57.251        |

*Note:* The models were adjusted assuming that the variances could differ between the indicators within each group, but the restriction was specified that they be equal between the groups. Likewise, independence between the indicators was imposed as a restriction, both within and between groups. AIC = Akaike Information Criterion; BIC = Schwarz Bayesian Information Criterion; SSA-BIC = sample size adjusted BIC; LMRT = adjusted Lo-Mendell-Rubin maximum likelihood ratio test; PBLRT = Parametric Bootstrap likelihood ratio test; \*  $p < 0.01$ ; \*\*  $p < 0.001$ .

Table 3 gives the probability coefficients of each subject belonging to a class in the selected model. The coefficients associated with the groups the participants were assigned to are shown in the main diagonal, in bold. All of those coefficients are close to or over 90%, indicating high classification accuracy. The number of subjects making up each of the seven classes is also given, both in absolute ( $n$ ) and relative (%) terms.

**Table 3.** Characterization of latent profiles and classification accuracy of individuals in each profile.

| Latent Profiles |              |              |              |              |              |              |              |     |       |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----|-------|
|                 | 1            | 2            | 3            | 4            | 5            | 6            | 7            | $n$ | %     |
| 1. VLEHOR       | <b>0.964</b> | 0.000        | 0.000        | 0.000        | 0.036        | 0.000        | 0.000        | 27  | 1.96  |
| 2. HEHOR        | 0.000        | <b>0.879</b> | 0.000        | 0.000        | 0.000        | 0.114        | 0.007        | 424 | 30.75 |
| 3. HOR/LEH      | 0.000        | 0.000        | <b>0.909</b> | 0.041        | 0.000        | 0.003        | 0.047        | 8   | 0.58  |
| 4. LHO_VLER     | 0.000        | 0.000        | 0.001        | <b>0.814</b> | 0.038        | 0.005        | 0.142        | 128 | 9.28  |
| 5. LER_VLHO     | 0.005        | 0.000        | 0.000        | 0.050        | <b>0.929</b> | 0.000        | 0.017        | 128 | 9.28  |
| 6. HHO/LER      | 0.000        | 0.137        | 0.001        | 0.001        | 0.000        | <b>0.839</b> | 0.022        | 252 | 18.27 |
| 7. MER/LHO      | 0.000        | 0.013        | 0.003        | 0.059        | 0.006        | 0.049        | <b>0.869</b> | 412 | 29.88 |

*Note:* The coefficients associated with the groups the participants were assigned to are in bold; VLEHOR = Very Low in Efficacy, Hope, Optimism, and Resilience; HEHOR = High in Efficacy, Hope, Optimism, and Resilience; HOR/LEH = High in Optimism and Resilience/Low in Efficacy and Hope; LHO\_VLER = Low in Hope and Optimism\_Very Low in Efficacy and Resilience; LER\_VLHO = Low in Efficacy and Resilience\_Very Low in Hope and Optimism; HHO/LER = High in Hope and Optimism/Low in Efficacy and Resilience; MER/LHO = Moderate in Efficacy and Resilience/Low in Hope and Optimism.

### 3.2. Description of the Profiles of Psychological Capital

Table 4 shows the mean scores of the members of the latent classes of the chosen model (direct and normalized scores). The first group ( $n = 27$ ; 1.96%) is composed of teachers with very low scores in all four components of psychological capital (profile: Very low in efficacy, hope, optimism, and resilience, VLEHOR). The second, and largest, group ( $n = 424$ ; 30.75%) exhibits a profile with high scores in the four components (profile: High in efficacy, hope, optimism, and resilience, HEHOR). In contrast to the first group, this second group is made up of teachers who demonstrate a strong conviction in their ability to mobilize motivational and cognitive resources available to them in order to successfully complete a particular task (efficacy); a positive motivational state giving them the necessary energy to plan personal goals and work towards those goals (hope); a general tendency to positively judge events that happen to them and hope that the future brings successful results (optimism); and a high capacity to thrive and emerge stronger from adverse situations (resilience). The third group contains very few teachers ( $n = 8$ ; 0.58%), who combine high levels of optimism and resilience with low levels of efficacy and hope (profile: HOR/LEH). It is a very heterogeneous profile, with large contrasts in the four resources of psychological capital. They demonstrate the high levels of flexibility and adaptability that characterize optimism and resilience [62] but lack the confidence (efficacy) and energy (hope) needed to drive towards success in tasks. The fourth and fifth groups are both, broadly speaking, profiles with low psychological capital; however, they do exhibit notable differences. The fourth group ( $n = 128$ ; 9.28%) contains teachers who, within their general low psychological capital, stand out for their very low scores in efficacy and resilience (profile: Low in hope and optimism\_ very low in efficacy and resilience LHO\_VLER). In contrast, the fifth group ( $n = 252$ ; 18.27%) exhibit very low scores in hope and optimism, and moderately low scores in efficacy and resilience (profile: LER\_VLHO). Finally, the sixth and seventh profiles are somewhat contrasting. The sixth profile ( $n = 252$ ; 18.27%) is characterized by uniting high levels of hope and optimism with low levels of efficacy and resilience (profile: HHO/LER). This is a group that demonstrates high personal expectations about future workplace performance [63], while their ability to persist in adverse situations is minimal. In contrast, the seventh profile ( $n = 412$ ; 29.88%) is made up of teachers with moderate scores in efficacy and resilience and low scores in hope and optimism (profile: MER/LHO). Figure 1 gives a graphical representation of the profiles.

**Table 4.** Means, standard errors and confidence intervals for the latent class solution.

|                | <i>M</i>     | <i>SE</i> | Confidence Intervals |          |
|----------------|--------------|-----------|----------------------|----------|
|                |              |           | Lower 5%             | Upper 5% |
| <i>VLEHOR</i>  |              |           |                      |          |
| Efficacy       | 2.38 (−2.19) | 0.014     | 2.15                 | 2.61     |
| Hope           | 2.05 (−2.54) | 0.018     | 1.77                 | 2.34     |
| Optimism       | 2.22 (−3.14) | 0.013     | 2.01                 | 2.44     |
| Resilience     | 2.76 (−2.29) | 0.015     | 2.52                 | 3.01     |
| <i>HEHOR</i>   |              |           |                      |          |
| Efficacy       | 4.34 (0.91)  | 0.040     | 4.27                 | 4.40     |
| Hope           | 4.66 (0.76)  | 0.027     | 4.61                 | 4.70     |
| Optimism       | 4.91 (0.88)  | 0.012     | 4.89                 | 4.93     |
| Resilience     | 4.53 (0.88)  | 0.028     | 4.49                 | 4.58     |
| <i>HOR/LEH</i> |              |           |                      |          |
| Efficacy       | 3.64 (−0.28) | 0.225     | 3.27                 | 4.01     |
| Hope           | 2.02 (−2.80) | 0.201     | 1.69                 | 2.35     |
| Optimism       | 4.40 (0.13)  | 0.137     | 4.17                 | 4.63     |
| Resilience     | 4.39 (0.46)  | 0.272     | 3.94                 | 4.84     |

Table 4. Cont.

|                 | <i>M</i>     | <i>SE</i> | Confidence Intervals |          |
|-----------------|--------------|-----------|----------------------|----------|
|                 |              |           | Lower 5%             | Upper 5% |
| <i>LHO_VLER</i> |              |           |                      |          |
| Efficacy        | 3.08 (−1.20) | 0.098     | 2.91                 | 3.24     |
| Hope            | 3.69 (−0.49) | 0.104     | 3.51                 | 3.86     |
| Optimism        | 3.86 (−0.69) | 0.046     | 3.79                 | 3.94     |
| Resilience      | 3.35 (−1.38) | 0.118     | 3.16                 | 3.55     |
| <i>LER_VLHO</i> |              |           |                      |          |
| Efficacy        | 3.26 (−0.81) | 0.061     | 3.15                 | 3.36     |
| Hope            | 3.00 (−1.38) | 0.079     | 2.87                 | 3.13     |
| Optimism        | 3.14 (−1.77) | 0.046     | 3.07                 | 3.22     |
| Resilience      | 3.74 (−0.54) | 0.066     | 3.63                 | 3.85     |
| <i>HHO/LER</i>  |              |           |                      |          |
| Efficacy        | 3.65 (−0.29) | 0.050     | 3.56                 | 3.73     |
| Hope            | 4.31 (0.24)  | 0.040     | 4.25                 | 4.38     |
| Optimism        | 4.79 (0.72)  | 0.019     | 4.76                 | 4.82     |
| Resilience      | 3.93 (−0.33) | 0.055     | 3.84                 | 4.02     |
| <i>MER/LHO</i>  |              |           |                      |          |
| Efficacy        | 3.77 (0.02)  | 0.037     | 3.71                 | 3.84     |
| Hope            | 3.97 (−0.12) | 0.049     | 3.88                 | 4.05     |
| Optimism        | 4.07 (−0.38) | 0.022     | 4.03                 | 4.11     |
| Resilience      | 4.06 (0.03)  | 0.035     | 4.01                 | 4.12     |

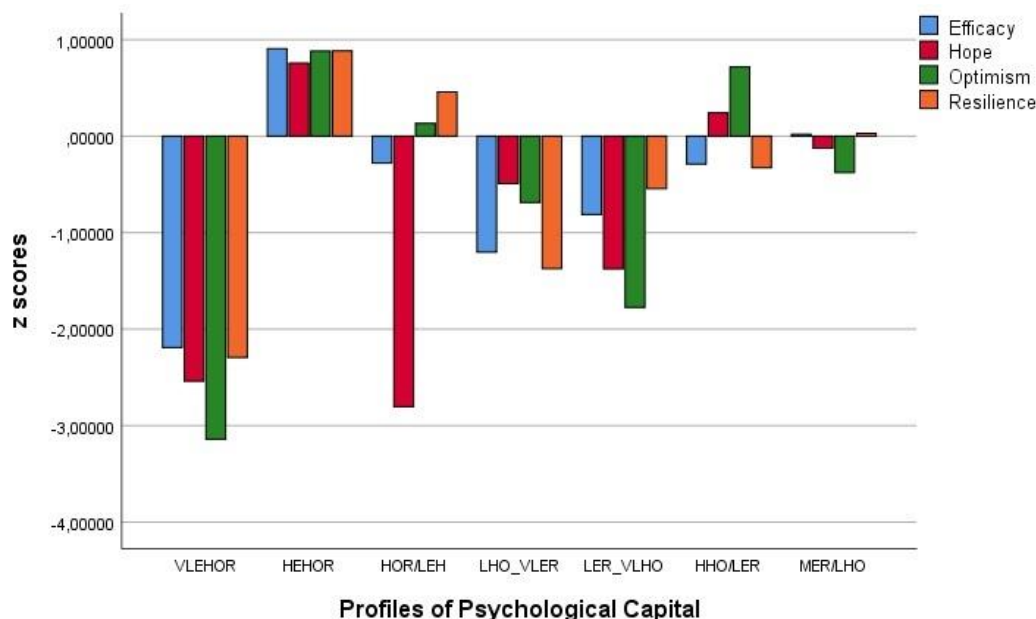
Note: VLEHOR = Very Low in Efficacy, Hope, Optimism, and Resilience; HEHOR = High in Efficacy, Hope, Optimism, and Resilience; HOR/LEH = High in Optimism and Resilience/Low in Efficacy and Hope; LHO\_VLER = Low in Hope and Optimism\_Very Low in Efficacy and Resilience; LER\_VLHO = Low in Efficacy and Resilience\_Very Low in Hope and Optimism; HHO/LER = High in Hope and Optimism/Low in Efficacy and Resilience; MER/LHO = Moderate in Efficacy and Resilience/Low in Hope and Optimism; Measurement scale of psychological capital (1–6); High scores indicate higher levels of each construct component (efficacy, hope, optimism, and resilience). Normalized mean scores are given in brackets (*z*).

### 3.3. Relationships between Profiles of Psychological Capital and Burnout

Once the effects of gender, professional experience, and educational stage were controlled for, the results of the MANCOVA indicate the existence of statistically significant differences between the profiles ( $\lambda_{Wilks} = 0.567$ ,  $F(6,1372) = 47.772$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.172$ ), with a large effect size. Statistically significant differences were also found between the profiles of psychological capital in the three burnout dimensions: Emotional exhaustion ( $F(6,1372) = 45.966$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.168$ ), depersonalization ( $F(6,1372) = 21.646$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.087$ ), and personal accomplishment ( $F(6,1372) = 154.425$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.404$ ). The differences were large in emotional exhaustion and personal accomplishment, and moderate in depersonalization.

Table 5 gives the descriptive statistics corresponding to the profiles of psychological capital in the burnout dimensions. A graphical representation of this is presented in Figure 2. With respect to the variable emotional exhaustion, the VLEHOR, HOR/LEH and LER\_VLHO profiles had significantly higher scores, with large effect sizes compared to the three lower-scoring profiles: MER/LHO ( $0.83 \leq d \leq 1.35$ ), HHO/LER ( $0.91 \leq d \leq 1.42$ ), and HEHOR ( $1.33 \leq d \leq 1.85$ ). Of those three, the HEHOR group had a significantly lower score, with a small ( $d = 0.42$ ) and moderate ( $d = 0.50$ ) effect size compared with the HHO/LER and MER/LHO groups, respectively.





**Figure 1.** Graphical representation of the profiles of psychological capital. *Note:* VLEHOR = Very Low in Efficacy, Hope, Optimism, and Resilience; HEHOR = High in Efficacy, Hope, Optimism, and Resilience; HOR/LEH = High in Optimism and Resilience/Low in Efficacy and Hope; LHO\_VLER = Low in Hope and Optimism\_Very Low in Efficacy and Resilience; LER\_VLHO = Low in Efficacy and Resilience\_Very Low in Hope and Optimism; HHO/LER = High in Hope and Optimism/Low in Efficacy and Resilience; MER/LHO = Moderate in Efficacy and Resilience/Low in Hope and Optimism.

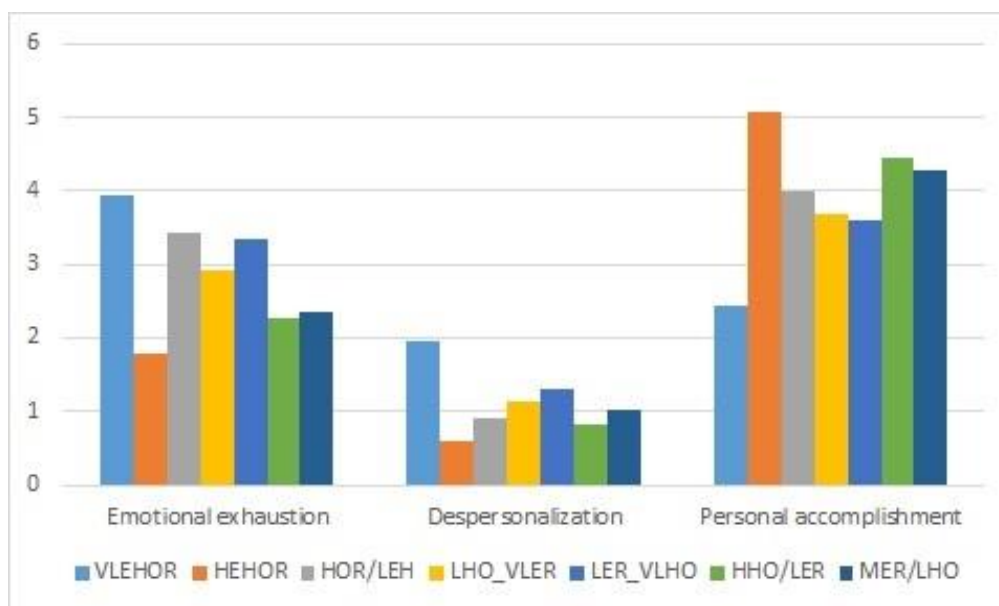
**Table 5.** Descriptive statistics (means and standard deviations) corresponding to the profiles of psychological capital in the burnout dimensions.

|          | Emotional Exhaustion |           | Depersonalization |           | Personal Accomplishment |           |
|----------|----------------------|-----------|-------------------|-----------|-------------------------|-----------|
|          | <i>M</i>             | <i>SD</i> | <i>M</i>          | <i>SD</i> | <i>M</i>                | <i>SD</i> |
| VLEHOR   | 3.94                 | 1.44      | 1.95              | 1.53      | 2.44                    | 0.97      |
| HEHOR    | 1.78                 | 1.17      | 0.60              | 0.72      | 5.06                    | 0.66      |
| HOR/LEH  | 3.42                 | 1.25      | 0.90              | 0.95      | 4.00                    | 0.71      |
| LHO_VLER | 2.91                 | 1.09      | 1.13              | 0.99      | 3.69                    | 0.65      |
| LER_VLHO | 3.34                 | 1.22      | 1.30              | 1.03      | 3.60                    | 0.74      |
| HHO/LER  | 2.27                 | 1.17      | 0.81              | 0.80      | 4.46                    | 0.66      |
| MER/LHO  | 2.36                 | 1.16      | 1.02              | 0.89      | 4.27                    | 0.71      |

*Note:* VLEHOR = Very Low in Efficacy, Hope, Optimism, and Resilience; HEHOR = High in Efficacy, Hope, Optimism, and Resilience; HOR/LEH = High in Optimism and Resilience/Low in Efficacy and Hope; LHO\_VLER = Low in Hope and Optimism\_Very Low in Efficacy and Resilience; LER\_VLHO = Low in Efficacy and Resilience\_Very Low in Hope and Optimism; HHO/LER = High in Hope and Optimism/Low in Efficacy and Resilience; MER/LHO = Moderate in Efficacy and Resilience/Low in Hope and Optimism. Measurement scale of burnout (0–6). High scores indicate higher levels of emotional exhaustion and depersonalization, low scores indicate a lower level of personal accomplishment.

In depersonalization, the VLEHOR profile again scored the highest, although in this case significant differences were found with the six remaining profiles. Differences with the LER\_VLHO profile were of moderate size ( $d = 0.75$ ), and with the other groups they were large ( $0.94 \leq d \leq 1.55$ ). The other two groups that, in addition to the VLEHOR group, exhibited low levels in the four components of psychological capital (LER\_VLHO and LHO\_VLER) also had higher scores in depersonalization than the four profiles that exhibited high levels in one or all of the components of psychological capital (HEHOR, HHO/LER, MER/LHO, and HOR/LEH). However, the comparisons between these profiles only reached statistical significance in the cases of HEHOR and HHO/LER. Comparisons with the HEHOR group demonstrated effect sizes ranging from moderate ( $d = 0.61$ , LHO\_VLER) to

large ( $d = 0.80$ , LER\_VLHO), with the differences with the HHO/LER group being small ( $d < 0.47$ ). Finally, it would be accurate to say that, while HEHOR and HHO/LER profiles had the lowest scores in depersonalization, no statistically significant differences were found in comparison with the profiles MER/LHO and HOR/LEH. The only exception was the comparison between HEHOR and HOR/LEH, although the effect size was small ( $d = 0.48$ ).



**Figure 2.** Graphical representation of the scores for each profile in the burnout dimensions. *Note:* VLEHOR = Very Low in Efficacy, Hope, Optimism, and Resilience; HEHOR = High in Efficacy, Hope, Optimism, and Resilience; HOR/LEH = High in Optimism and Resilience/Low in Efficacy and Hope; LHO\_VLER = Low in Hope and Optimism\_Very Low in Efficacy and Resilience; LER\_VLHO = Low in Efficacy and Resilience\_Very Low in Hope and Optimism; HHO/LER = High in Hope and Optimism/Low in Efficacy and Resilience; MER/LHO = Moderate in Efficacy and Resilience/Low in Hope and Optimism.

Finally, in the personal accomplishment variable, almost the opposite pattern was seen. The VLEHOR profile had the significantly lowest score, with a large effect size for these differences in comparisons with the other six profiles ( $1.68 \leq d \leq 3.80$ ). The profiles LER\_VLHO and LHO\_VLER scored significantly lower than the profiles HOR/LEH, MER/LHO, HHO/LER, and HPC. The differences with the HOR/LEH group were small ( $d = 0.45$ , LHO\_VLER) and moderate ( $d = 0.58$ , LER\_VLHO), and large with the other three profiles ( $0.84 \leq d \leq 2.12$ ). At the other end of the scale, the HEHOR profile had significantly the highest score in personal accomplishment, with large effect sizes in the differences with the other profiles ( $0.87 \leq d \leq 3.80$ ).

All three of the covariables included in the model exhibited statistically significant effects for gender ( $F(3,1375) = 13.887$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.030$ ), years of experience ( $F(3,1375) = 6.973$ ,  $p < 0.001$ ,  $\eta_p^2 = 0.015$ ), and educational stage ( $F(3,1375) = 3.326$ ,  $p < 0.05$ ,  $\eta_p^2 = 0.007$ ), although the effect sizes were small. Men exhibited significantly higher scores than women in depersonalization ( $t(1377) = -5.98$ ,  $p < 0.001$ ), and significantly lower scores in personal accomplishment ( $t(1377) = 2.953$ ,  $p < 0.05$ ). The variable years of experience exhibited statistically significant differences in emotional exhaustion, with teachers that had less experience (i.e., less than one year) scoring significantly higher ( $F(5,1373) = 3.679$ ,  $p < 0.05$ ). Finally, with respect to the educational stage, teachers in obligatory secondary education had significantly higher scores than the other stages in emotional exhaustion ( $F(5,1373) = 3.955$ ,  $p \leq 0.001$ ), and significantly lower scores in personal accomplishment ( $F(5,1373) = 13.816$ ,  $p < 0.001$ ).

#### 4. Discussion

This study aimed to analyze the relationship between psychological capital and teacher burnout, in line with the research interest in human beings' resources and potential as a way to encourage sustainable working conditions [19]. The principal contribution of the study was the adoption of a person-centered approach for determining the possible existence of different teacher profiles of psychological capital. In addition, we aimed to identify which teacher profiles were more and less vulnerable to burnout, as it is a group that is particularly prone to suffering from that syndrome.

In terms of the first objective, the results confirm the hypothesis that there are teacher profiles that differ in their psychological capital. Our results suggest the existence of seven profiles. Four of these profiles combine the components of psychological capital in similar proportions, albeit to different extents: One high profile (HEHOR), made up of teachers with high levels in the four components; one profile with moderately low levels of efficacy and resilience, and very low levels of hope and optimism (LER\_VLHO); one profile that is almost the opposite, with moderately low levels of hope and optimism, and very low levels of efficacy and resilience (LHO\_VLER); and one profile that is very low in psychological capital (VLEHOR), representing a very small number of teachers exhibiting extremely low levels of efficacy, hope, optimism, and resilience.

We identified three other profiles, which were qualitatively different in the combinations of the four components of psychological capital. Two were somewhat contrasting, in so far as one (profile: HHO/LER) showed high levels of hope and optimism, and low levels of efficacy and resilience, whereas the other (profile: MER/LHO) combined low levels of hope and optimism and moderate levels of efficacy and resilience. The remaining profile (HOR/LEH) is characterized by combining high levels of optimism and resilience with low levels of efficacy and very low levels of hope. Despite being empirically different conceptual constructs [25], there is evidence that the components of psychological capital have some common attributes that encourage synergetic action [64], which may explain the combinations in these three profiles. Hope and optimism both allude to the development of positive future expectations about achieving desired objectives [65], while efficacy and resilience both have the characteristic of perseverance in the face of difficulties [66]. Both optimism and resilience are characterized by flexibility and adaptability to circumstances [67,68], and efficacy and hope share what Snyder [69] defined as willpower, referring to the motivation and energy needed to reach a particular goal [63]. Consequently, one may hypothesize that teachers with an HHO/LER profile would be characterized by having high future expectations about achieving professional objectives but lacking the capacity to persist and maintain efforts focused on the task when faced with obstacles to their objectives. On the other hand, teachers with a MER/LHO profile would exhibit a moderate capacity for perseverance even in adverse situations, but their future expectations about achieving desired professional objectives would be very low. Finally, the HOR/LEH profile would be made up of teachers with a great capacity to adapt to work circumstances as needed, even if unfavorable, while they would lack motivation and energy to make the effort and successfully drive towards their professional goals. Obviously, this is a plausible, but merely tentative, explanation, given that research into teacher profiles of psychological capital is as yet unpublished. Future work should more thoroughly analyze how well teachers fit this characterization.

As a whole, the teacher profiles identified in this study are an empirical confirmation that the four components of psychological capital combine differently in different people, as suggested in recent years by pioneering authors, such as Luthans and Youssef-Morgan [64]. This finding is consistent with results from the little research that has been done to date from a person-centered approach (albeit in other professional groups). Our data indicates that, in line with results from other studies [43,44], the profiles of psychological capital differ from each other quantitatively and qualitatively, such that in some people, there is a balance of the dimensions of efficacy, hope, optimism, and resilience (at different levels), while in other people the four components are present in different proportions. Of the latter, only one of the profiles we identified (profile: HOR/LEH) is similar to profiles found in previous research. Given that those studies were done in work contexts other than education, it is possible that

the differences between our results and prior research findings may be due, at least in part, to the particular characteristics and idiosyncrasies of such a specific professional group as teachers. This indicates the possibility that psychological capital is affected by intercultural and interorganizational variations [70], and future research should determine whether the profiles we identified are replicable, in teachers and in other professional groups.

Our second objective was to analyze the relationship between the teacher profiles of psychological capital and burnout. In general terms, our results indicate that the lower the teacher psychological capital, the higher the vulnerability to burnout and vice versa. In particular, the teacher group with the lowest scores in efficacy, hope, optimism, and resilience (VLEHOR) exhibited the most pronounced symptoms of emotional burnout and depersonalization and the lowest personal accomplishment. The other two profiles with low generalized psychological capital (LER\_VLHO and LHO\_VLER) were at higher risk of suffering burnout than those profiles that had high levels in one or all of the constituents of psychological capital, particularly in the dimensions of emotional exhaustion and low personal accomplishment. On the other hand, teachers enjoying high levels of efficacy, hope, optimism, and resilience (HEHOR) had scores in the three burnout dimensions, suggesting the lowest risk of burnout. These results indicate that those teachers are less susceptible to burnout given that they: (a) Generally perceive themselves as competent in carrying out a task or successfully overcome a particular obstacle; (b) trust in their ability to reach objectives and plan appropriate strategies to achieve them; (c) tend to evaluate positive events referring to stable, general, internal factors (e.g., intelligence, ability) and negative events in terms of external, unstable specific factors (e.g., bad luck, a bad day), and also tend to think that the future will bring new successes; and (d) usually overcome adversities, treating them as opportunities to develop new skills. However, teachers lacking these four psychological resources, whether to a moderate or to a great extent, are significantly more likely to feel burned out in the course of their profession.

It might be surprising, but teachers combining high levels in some components of psychological capital with low levels in others exhibited the lowest scores in depersonalization (along with the HEHOR profile). This suggests that the availability of at least two of the four components of psychological capital (regardless of which) in itself constitutes an effective resource for teachers, given that this is associated with a lower tendency to develop attitudes of coldness and indifference towards students and other members of the educational community.

Within the profiles exhibiting qualitative differences in the combination of components of psychological capital, the HOR/LEH profile has rather a complex relationship with burnout. Similar to the HHO/LER and MER/LHO profiles, teachers in the HOR/LEH group demonstrate significantly fewer symptoms of depersonalization and low personal accomplishment than those profiles with low and very low psychological capital. However, their scores in the emotional exhaustion dimension are just as high as profiles with low and very low psychological capital. So, it seems that the high scores in optimism and resilience that this group of teachers exhibit are associated with a moderately low likelihood of experiencing depersonalization and lack of personal accomplishment. In other words, by virtue of these high levels of optimism and resilience, these teachers exhibit high flexibility and adaptability to events [67,68], which is related to a relatively low susceptibility to apathy and cynicism in their workplace interactions, and with a moderately low tendency to develop a desire to change jobs. However, low efficacy, together with a very low level of hope, means little confidence and energy to successfully carry out tasks [63], which would drastically affect motivation and teachers' beliefs in their abilities to respond to the demands of their profession. As a result, these teachers feel more exposed to feeling emotionally exhausted in their daily working lives. Given that, the small number of teachers found with the HOR/LEH profile could be at risk of suffering from at least one of the core symptoms at the heart of burnout [71].

Burnout in teachers comes about as the result of the interaction of contextual and personal factors [8]. The Job Demands-Resources Model (JD-R) [72] is one of the reference frameworks that provides the best conceptual and empirical support to this interactive effect [73], and offers a reasonable

explanation of the role played by psychological capital in relation to burnout. The JD-R model maintains that workers' health and wellbeing depend on the balance that exists between positive (resources) and negative (demands) job characteristics. The likelihood of a worker suffering stress and burnout is higher when a highly demanding workplace context is added to scarce job resources to face the challenge. In this situation, the worker feels obliged to make extra efforts to reach work objectives, which in the absence of resources, ends up meaning significant costs to their health and performance (e.g., physical and mental exhaustion, irritability, disengagement). In contrast, job resources mitigate the negative effect of job demands on burnout. Among the various factors that the JD-R model conceptualizes as job resources, there are worker psychological characteristics that: (a) Contribute to achieving work objectives; (b) reduce job demands and the associated physical and/or psychological harm; and/or (c) stimulate the workers' personal growth [74]. Personal psychological resources that comply with these requirements, and have thus been identified in research as job resources [73,75], including efficacy, hope, optimism, and resilience.

From this point of view, it is possible that teachers with high levels of some of the components of psychological capital, and, to a greater extent, teachers with the high psychological capital profile, are endowed with adaptive personal resources (i.e., efficacy, hope, optimism, resilience) that can reduce the psychological impact of the severe demands of their professional context. However, teachers with profiles of low and (particularly) very low psychological capital lack these personal resources, which is associated with a markedly higher vulnerability to suffering from burnout.

In summary, the results of this study seem to endorse those from other studies [31,36–39], which, using a variable-centered approach, have shown psychological capital to be associated with lower vulnerability to teacher burnout. However, our findings are a significant contribution, identifying the existence of a broad, heterogeneous cast of teacher profiles of psychological capital. Some of these profiles, such as those with very low and low psychological capital, were found, respectively, in situations of high and moderate exposure to burnout. In contrast, there were also a significant number of teachers whose profile of high psychological capital is associated with a lower risk of feeling burned out at work. Finally, our results show the existence of groups of teachers in whom the four components of psychological capital are in different proportions (high in some components and low in others). To a lesser extent than teachers with high psychological capital, these profiles also have psychological resources available that are associated with moderately low levels of burnout, especially regarding the dimensions of depersonalization and lack of personal accomplishment.

Although the identification of differentiated profiles of teacher psychological capital and the analysis of their relationship with burnout were the two main objectives of this study, gender, teaching experience and educational stage were considered as covariables, and demonstrated a significant, albeit small, effect. Based on our results, men exhibit significantly higher levels than women in the dimensions of depersonalization and lack of personal accomplishment in teaching, something that has also been demonstrated in other studies [46,48]. Similarly, the newest teachers were shown to be the most susceptible to emotional exhaustion, which seems to support findings from other research that associate a lower vulnerability to burnout with greater teaching experience [50,51]. Finally, other studies have indicated higher levels of burnout in teachers of higher educational levels, as it is a more demanding context [16,52]. Our findings seem to follow that line, showing the highest levels of emotional exhaustion and lowest personal accomplishment in secondary education teachers. Therefore, as gender, experience, and educational stage seem to play important roles in teacher burnout, future work should specifically analyze the extent to which these three variables have a differential effect on the relationship between profiles of psychological capital and burnout. It would also be interesting to broaden the research to include university teachers.

#### *4.1. Implications for Promoting Sustainable Working Conditions for Teachers*

Worker wellbeing is one of the backbones of the promotion and development of healthier organizations and societies [21]. In accordance with the promising line of research ascribed to the



psychology of sustainability and sustainable development, the results of our research emphasize the important role played by psychological capital as a mix of resources and personal potential that contribute to the development of sustainable working conditions for teachers, as the availability of these resources is associated with lower vulnerability to burnout. Given that, and assuming that psychological capital is plastic [76] and as such can be stimulated, the design and application of interventions based on promoting (a) teachers' confidence in their own abilities to successfully complete challenging tasks (efficacy), (b) their abilities to persevere in pursuit of their personal goals and to adapt to the unexpected (hope), (c) the development of positive causal attributions and realistic expectations of success (optimism), and (d) the capacity to recover and emerge stronger from adverse situations (resilience) would constitute a socially desirable goal.

In view of the results of our study, teachers with low and very low profiles of psychological capital would be a priority focus of intervention, as their levels of burnout are significantly higher. As a general rule, these interventions to develop psychological capital should be governed by the following principles [64]: (a) Encourage the replacement of dysfunctional thought patterns with more adaptive patterns; (b) stimulate the development of more engaged goals (e.g., "I am going to do this") in place of avoidance goals (e.g., "I am going to stop doing this"); (c) incentivize the planning of a broad range of strategies aimed at encouraging the achievement of proposed goals, along with contingency plans in case of obstacles; and (d) encourage organizational climates that stimulate workers to develop their psychological capital. In addition, the existence of qualitatively different profiles of psychological capital as shown by our study suggests that it would be useful to design more specific interventions according to each teacher's strengths and weaknesses. For example, teachers fitting the HHO/LER profile may benefit more from an intervention aimed primarily at improving their efficacy and resilience, whereas teachers with a MER/LHO profile would first require work aimed at stimulating their hope and optimism. Naturally, this does not mean that any teacher, regardless of their profile, would not benefit from a general intervention for the four components of psychological capital, making the most of their synergetic action [64]. In conformance with the Conservation of Resources theory from Hobfoll [77], the availability of resources (e.g., efficacy) drives the individual to a rising spiral of acquisition, development, and preservation of new resources (e.g., resilience, optimism, and hope). Interventions may benefit from this caravan action of resources [78] to strengthen and enhance teachers' psychological capital overall.

#### 4.2. Limitations of the Study

The contributions of this study should be considered in light of its limitations. In the first place, the transversal nature of the study does not allow causal relationships between psychological capital profiles and burnout to be established. Future work may examine this relationship via longitudinal designs. This type of design (such as using latent growth modeling) would also allow the long-term progression of teachers' psychological profiles to be analyzed. A second limitation is the composition of the sample, which was extremely varied in terms of representation of the different educational stages, gender, and years of experience. It is possible that the specific sociodemographic characteristics of our sample might have influenced the configuration of the profiles of psychological capital we identified, and the relationship between these profiles and burnout. In order to make the results more generalizable to the teaching population, future studies should use more thorough recruitment procedures that would give more balanced samples in terms of these variables. That would make it possible, among other things, to determine to what extent the results of this study are replicable. It would also make it possible to analyze the possible makeup of different teacher profiles of psychological capital according to gender, educational stage, and years of teaching experience.

Finally, the use of self-report scales as the only data collection process could affect the veracity of the information thus obtained. Future work could achieve more rigor and informational richness via the combination of different procedures (questionnaires, deep interviews, diaries, in situ observations, etc.). In terms of measuring instruments, particularly with respect to the MBI, it is worth noting another



limitation. In this study, the depersonalization dimension gave a relatively low reliability ( $\alpha = 0.62$ ), something that is frequently in evidence in studies with non-USA samples and non-English speaking samples [79]. Thus, although the MBI is the most widely used instrument for evaluating burnout, future studies should corroborate the results from this research using more consistent instruments.

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