



European Journal of Educational Research

Volume 10, Issue 2, 693 - 703.

ISSN: 2165-8714

<https://www.eu-jer.com/>

Burnout in Portuguese Teachers: A Systematic Review

Ana Isabel Mota*

University of Minho, PORTUGAL

João Lopes

University of Minho, PORTUGAL

Célia Oliveira

Lusófona University, PORTUGAL

Received: June 19, 2020 • Revised: January 17, 2020 • Accepted: March 5, 2021

Abstract: Teachers are one of the professional classes most vulnerable to emotional instability and fatigue associated with their professional activity. The present study is a systematic review about burnout in Portuguese teachers and has two main objectives. The first is to understand the state of the art of the burnout phenomenon in Portuguese teachers from basic education to secondary education. The second is to analyze the types of variables considered in the exploration and understanding of the burnout phenomenon, from a three-dimensional structure: personal, organizational, and classroom. Results show that the set of personal and organizational variables are the most frequently analyzed in studies on burnout in teachers. Nevertheless, the results of the analyzed studies are unclear and inconsistent, highlighting the need for further studies that allow to clarify the role of different variables on burnout in Portuguese teachers. More studies are needed to determine the actual extent of burnout and, consequently, to design educational and psychological interventions to support teachers.

Keywords: *Burnout syndrome, teachers, risk factors, systematic review.*

To cite this article: Mota, A. I., Lopes, J., & Oliveira, C. (2021). Burnout in Portuguese teachers: a systematic review. *European Journal of Educational Research*, 10(2), 693-703. <https://doi.org/10.12973/eu-jer.10.2.693>

Introduction

The rapid changes imposed on the modern world and the challenges associated with social and economic uncertainty and instability, which characterize Portuguese society today, inevitably generate feelings of insecurity and discouragement in the working classes (e.g., Gomes et al., 2006). Teachers are one of the professional classes most vulnerable to emotional instability and fatigue associated with their professional activity (Droogenbroeck & Spruyt, 2015). In fact, teachers' working conditions and work forms have undergone profound changes in recent years (e.g., Droogenbroeck et al., 2014). Technological evolution, changes in the organization of civil society, and changes in the structure and content of school curricula are some of the variables that can negatively contribute to teachers' self-perception and to how they relate to different agents in the educational context, including students, parents, colleagues, and directors, among others (Otero et al., 2008).

Although previous studies suggest that Portuguese teachers consider themselves generally satisfied with their profession (Ferreira & Martinez, 2012), teachers themselves seem to recognize and perceive their profession as a high source of stress (Pinto et al., 2003). Gomes et al. (2010) found that almost 40% of the teachers reported high levels of stress in their sample. Long working hours, time pressure, bureaucratic work, types of employment contracts, a high number of students per class, and student's misbehavior were found to be the variables that contribute the most to the stress levels among Portuguese teachers (Cardoso et al., 2002; Gomes et al., 2010; Martins et al., 2015; Pinto et al., 2003). Ultimately, these stressors contribute to the wish of Portuguese teachers to leave their teaching profession (e.g., Cardoso et al., 2002; Martins et al., 2015).

Teaching has been identified in the specialized literature as the professional area most susceptible to burnout's adverse effects, largely due to the profession's relational nature (Kinman et al., 2011; Maslach & Jackson, 1986; Maslach & Leiter, 1997). Burnout is considered the result of prolonged exposure to stress (Skaalvik & Skaalvik, 2009) and the final phase of a continuous process (Schaufeli et al., 2009). The most widespread and accepted definition of burnout was proposed by Maslach and Jackson (1986). The authors postulated that burnout is a multidimensional psychosocial syndrome characterized by high levels of (1) emotional exhaustion and (2) depersonalization, and (3) low perception of personal accomplishment. Emotional exhaustion is characterized by a lack of energy and enthusiasm or feelings of

* **Corresponding author:**

Ana Isabel Mota. School of Psychology, University of Minho, 470-057 Braga, Portugal. ✉ anaisabelmota@hotmail.com

exhaustion. Depersonalization reflects the development of cynical attitudes and feelings toward others, who come to be perceived as objects. Low professional achievement is characterized by negative self-assessment and feelings of dissatisfaction with one's professional situation (Maslach & Leiter, 1997).

Based on their early research, Maslach and Jackson (1986) developed the Maslach Burnout Inventory (MBI) to access the three burnout dimensions. The authors defined criteria to classify the results obtained through the MBI into three levels: low burnout, risk of burnout, and full burnout. Low burnout is defined by low scores for the emotional exhaustion and depersonalization subscales and high scores for the personal accomplishment subscale. Risk of burnout is characterized by high scores for the emotional exhaustion and depersonalization subscales and intermediate scores for the personal accomplishment subscale, or by intermediate scores for the emotional exhaustion and depersonalization subscales and high values for the personal accomplishment subscale. Full burnout is characterized by high scores for the emotional exhaustion and depersonalization subscales and low scores for the personal accomplishment subscale.

In teachers, burnout may result from exposure to sources of stress specific to the educational context (Moreno et al., 2003). Extensive literature has identified different variables to contribute to teachers' burnout. On the one hand, many studies have linked burnout with different sociodemographic variables, such as gender, age, or teaching experience (e.g., Aparisi et al., 2019; Droogenbroeck et al., 2014; Nazari et al., 2020; Purvanova & Muros, 2010). The role of psychological mechanisms or conditions in burnout has also been explored, such as coping strategies, personality traits, emotional intelligence, self-efficacy, depression, or anxiety (e.g., Arvidsson et al., 2019; Bakusic et al., 2017; Mérida-López & Extremera, 2017). On the other hand, previous research has identified school context antecedents for teachers' burnout, such as workload, student misbehavior, or social support (e.g., Malinen & Savolainen, 2016; Rajendran et al., 2020; Richards et al., 2018)

Nevertheless, the results found at the international level on the role of several variables in burnout are often incongruent and unclear (e.g., Arce et al., 2003), reinforcing the idea of burnout as a highly context-dependent phenomenon. For this reason, it is important that studies on burnout in teachers be sensitive to the specific characteristics and subjective culture of teachers, establishing hypotheses and research objectives that take into account these particularities (e.g., Carlotto & Câmara, 2007). The premise that all realities have their characteristics, which differ from the realities of other countries, reinforces the importance of considering the reality of Portuguese teachers and the Portuguese educational context.

Portuguese Education System

Portugal's education system is organized in three main sequential levels: pre-primary education, basic education, and secondary education (Figure 1). Education in Portugal is free and regulated by the State through the Ministry of Education for both public and private schools. Since 2009 education in Portugal is compulsory until the end of the 12th grade (secondary education) or until the age of 18.

Age	3	4	5	6	7	8	9	10	11	12	13	14	16	16	17
Grade	Pre-primary education			1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th
Level/cycle	Pre-primary education			1 st cycle			2 nd cycle			3 rd cycle			Secondary education		
				Basic education											

Figure 1. Portuguese Education System (Santiago et al., 2012)

In Portugal, burnout has been studied among various professionals, for example, athletes, psychologists, nurses, and teachers (e.g., David & Quintão, 2012; Figueiredo-Ferraz et al., 2013; Gomes et al., 2017). In the case of teachers, there are studies in contexts ranging from preschool to higher education (e.g., Gomes, Faria et al., 2013; Gomes, Oliveira et al., 2013; Patrão et al., 2012; Picado et al., 2014; Silva & Astorga, 2012). Even though burnout syndrome has become an important research topic internationally in the last two decades (Mérida-López & Extremera, 2017), studies in Portugal are scarce (Figueiredo-Ferraz et al., 2009).

Methodology

Research Goal

The present study has two main objectives. The first is to understand the state of the art of the burnout phenomenon in Portuguese teachers from the 1st cycle of basic education to secondary education, that is, to determine the burnout levels found in studies conducted with teachers of different teaching levels.

The second study objective is to understand which aspects of burnout have been studied in Portuguese teachers at those teaching levels, that is, to analyze the types of variables considered in the exploration and understanding of the burnout phenomenon. This analysis will allow the determination of the extent to which the themes and variables are similar or different from those typically referenced in the international literature. This last aspect is particularly

relevant because burnout may derive from unique aspects of the structure of the Portuguese educational system. For this purpose, it is suggested that these variables be structured from three dimensions usually referenced in the literature (e.g., Droogenbroeck et al., 2014; Hastings & Bham, 2003; Masmoudi et al., 2016; Otero et al., 2008; Tatar & Horenczyk, 2003): (i) personal variables, (ii) organizational variables, and (iii) classroom variables.

Personal variables include the set of sociodemographic and contextual variables that characterize each individual and his or her professional circumstances, as well as a set of variables intrinsically related to the individual. Organizational variables represent aspects related to the Portuguese school context and the mode of operation and idiosyncrasies of the educational system and the school. Finally, classroom variables are directly related to students and to the specific and exclusive context of the classroom.

Data Search

A data search was performed for scientific articles about burnout in Portuguese teachers, using the following databases: Online Knowledge Library (B-On), RECAPP, SciELO, Web of Science, EBSCOhost, ERIC, ScienceDirect, Wiley Online Library, and Google Scholar. Articles published in Portuguese or English between 2000 and 2019 were located using the following keywords: "burnout" and "teachers", "burnout" and "teachers" or "Portuguese", "burnout" and "teachers" or "Portugal", "teacher" and "burnout", "teacher" and "burnout" or "Portuguese", and "teacher" and "burnout" or "Portugal". Additional manual searches were performed to complete the search. The Data search was carried out in April 2019.

Inclusion and Exclusion Criteria

The following inclusion criteria were defined for this study: (a) studies published in or after 2000; (b) studies published in indexed Portuguese or international journals; (c) studies published in Portuguese (Portuguese or Brazilian Portuguese), Spanish or English; (d) studies conducted exclusively with teachers from the 1st cycle of basic education to secondary education teaching in the Portuguese educational context; and (e) studies evaluating burnout or burnout and other variables.

The exclusion criteria were as follows: (a) studies conducted exclusively with or including teachers of other teaching levels or characteristics (e.g., special education, preschool education, university education, or vocational education); (b) studies conducted with other agents of the Portuguese educational system (e.g., childhood educators, special education teachers, or teacher trainers); (c) studies conducted with Portuguese teachers teaching in other countries (cross-cultural studies); (d) publications of an academic nature (i.e., master's theses and doctoral dissertations); (e) publications in a format other than article format (i.e., meeting publications or presentations); and (f) studies of a different nature (i.e., validation of measurement instruments or theoretical studies).

Data Analysis

According to the inclusion criteria, an initial set of 83 studies was analyzed by two judges with knowledge and experience in research in the field of educational and school psychology. In the first phase, analysis of the titles and abstracts led to the exclusion of 46 studies. In the second phase, analysis of the titles, abstracts, and methodologies led to the exclusion of 30 studies. In the third phase, seven studies that met the inclusion criteria were identified (Figure 2). There was 100% interjudge agreement in the three analysis and selection phases.

The following characteristics of the studies included in the review were input into a Microsoft Excel worksheet: (a) title; (b) authors; (c) year of publication; (d) type of publication; (e) type of research (qualitative, quantitative or mixed); (f) methodological design (cross-sectional or longitudinal); (g) teaching cycle of the teachers in the sample; (h) variables studied (i.e., burnout or burnout and others); (i) measurement instruments used; (j) research objectives; and (k) main results.

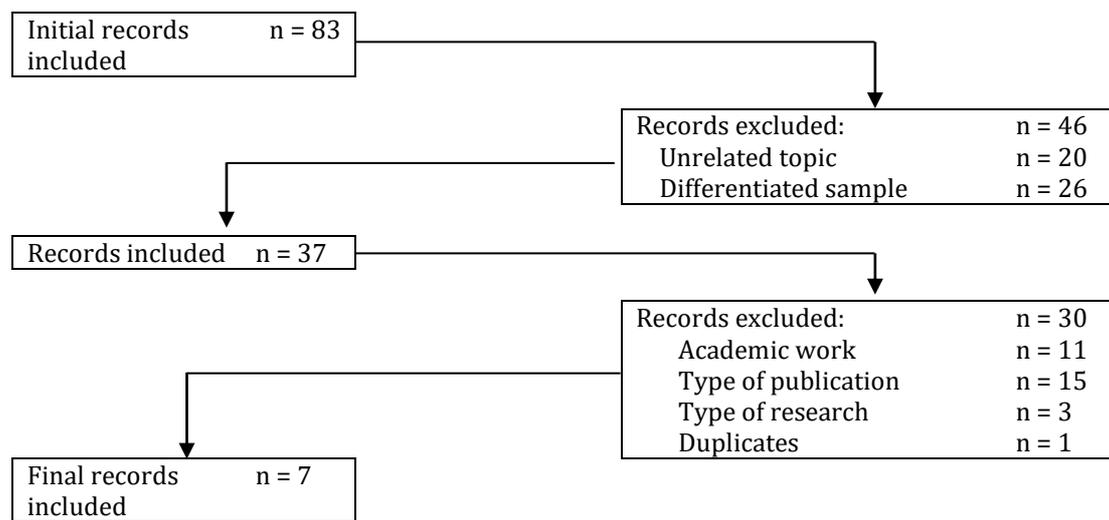


Figure 2. Analysis and selection process of studies included in the review

Findings / Results

Table 1 presents a summary of the characteristics of the analyzed studies. Table 2 provides the main information relative to each of the seven analyzed studies.

Table 1. Characteristics of the studies included (N = 7)

Characteristics	Results
Flow of publications (per year):	
Highest number of studies	2012
Lowest number of studies	2003/5/6/10/18
Type of publication:	
Article in a scientific journal	7
Methodology:	
Quantitative	7
Design:	
Cross-sectional	7
Sample size:	
Mean	606 (SD = 349.9)
Maximum	1162
Minimum	137
Teaching cycle:	
1CBE	1
1CBE, 2CBE, 3CBE, SE	1
2CBE, 3CBE, SE	2
3CBE, SE	2
BE, SE*	1
Instruments used:	
Self-report questionnaires	7
Questionnaires used:	
Burnout:	
Maslach Burnout Inventory – General Survey	3
Maslach Burnout Inventory – Educators Survey	4
Oldenburg Burnout Inventory	1
Stress:	
Teachers Stress Questionnaire	5
Questionnaire from the Institute for Stress Prevention and Occupational Health	1
Other:	
COPE	1
Stanford Presenteeism Scale	1
Occupational Stress Indicator	1

Note. 1CBE = 1st cycle of basic education; 2CBE = 2nd cycle of basic education; 3CBE = 3rd cycle of basic education; BE = basic education; SE = secondary education.

*Years of education not specified.

Table 2. Descriptive data of the analyzed studies (N = 7)

Authors (year)	Objective(s)	N	Sample		Instruments	Results
			Teaching Cycle			
Ferreira and Martinez (2012)	Study the possible relationship between presenteeism and burnout in public and private schools.	281	1CBE		MBI-GS Stanford Presenteeism Scale	Public school teachers exhibited higher levels of presenteeism and burnout than private school teachers.
Gomes, Montenegro, Peixoto, and Peixoto (2010)	Identify differences in and predictors of teachers' sources of stress, burnout, job satisfaction levels, and physical health.	689	3CBE SE		MBI-ES TSQ Occupational Stress Indicator	There was higher occupational stress among female teachers, older teachers, teachers with more precarious professional ties, with longer working hours and more students in the classroom.
Gomes, Peixoto, Pacheco, and Silva (2012)	Analyze the experience of stress and burnout before and after (2004/2005 and 2008/2009) the change in the Teaching Career Statute in Portugal.	1162	BE SE		MBI-ES TSQ	The experience of stress and burnout increased between the two evaluation times, but there were no substantial changes in burnout syndrome.
Gomes, Silva, Mourisco, Silva, Mota, and Montenegro (2006)	Analyze the relationships between teachers' sources of stress, burnout, job satisfaction levels, and physical health problems.	127	3CBE SE		MBI-GS TSQ Occupational Stress Indicator	There were very significant occupational stress levels, a prevalence of exhaustion of 13% and various physical health problems.
Pinto, Lima, and Silva (2003)	Study the perceived occupational stress levels and their predictors, and the associated burnout levels.	777	2CBE 3CBE SE		MBI-ES TSQ	Problems related to students and time pressures were the main sources of stress; 30.4% of the teachers were at high risk of progressing to full burnout.
Pinto, Lima, and Silva (2005)	Study the incidence of stress and burnout predictors and the role of coping strategies in the relationship between stress and burnout.	777	2CBE 3CBE SE		MBI-ES COPE TSQ	Lack of time and motivation and student misbehavior were the main sources of stress. Denial and avoidance coping strategies mediated the relationship between stress and burnout.
Santos, Teixeira, and Queirós (2018)	Identify and compare the levels of stress and burnout in teachers from two regions of the country.	420	1CBE 2CBE 3CBE SE		MBI-GS OLBI QIPSS	Sources of stress were the factor that most contributed to explaining burnout. No influence of sociodemographic variables on burnout was observed.

Note: 1CBE = 1st cycle of basic education; 2CBE = 2nd cycle of basic education; 3CBE = 3rd cycle of basic education; BE = basic education; SE = secondary education; MBI-ES = Maslach Burnout Inventory – Educators Survey; MBI-GS = Maslach Burnout Inventory - General Survey; TSQ = Teachers Stress Questionnaire; OLBI = Oldenburg Burnout Inventory; QIPSS = Questionnaire from the Institute for Stress Prevention and Occupational Health

The articles follow the bibliographic order in which they are presented in the reference section of this study.

Burnout Levels

All studies used the Maslach Burnout Inventory (MBI) to assess burnout. The MBI is a self-report instrument composed of the following three subscales that are scored on a Likert scale: (i) emotional exhaustion, which evaluates feelings of psychological and emotional exhaustion due to professional demands; (ii) depersonalization, which evaluates the distance or emotional indifference from other actors in the professional context; and (iii) personal accomplishment, which evaluates the perception of professional competence and success, and feelings of pleasure associated with professional performance. The MBI is available in three versions: General Version, Version for Teachers, and Version for Health Professionals. Four (57.1%) of the analyzed studies used the version for teachers, and three (42.9%) studies used the general version.

Some of the analyzed studies ($n = 3$, 42.9%) presented the overall burnout levels obtained with the MBI. The results indicated that 6% to 13% of Portuguese teachers experienced full burnout (Gomes et al., 2006; Pinto et al., 2003, 2005), approximately 30.4% are at risk of burnout, and 6% have low levels of burnout (Pinto et al., 2003, 2005). Another study found no teachers experiencing full burnout (Gomes et al., 2012).

Four (57.1%) studies distinguished the results obtained for the three MBI subscales. The results suggested that 2% to 18% of teachers had high emotional exhaustion scores, the burnout dimension for which the highest levels were found (Gomes et al., 2006, 2010, 2012; Santos et al., 2018). For depersonalization, the percentage varied between 0.4% and 2.3% (Gomes et al., 2010, 2012; Santos et al., 2018), with the exception of one study, in which 17.9% of teachers had high levels of depersonalization (Gomes et al., 2006). Finally, 3% to 6% of teachers showed high levels of personal accomplishment (Gomes et al., 2006, 2010, 2012).

One study used the OLBI to evaluate burnout and identified 5% of teachers with high levels of emotional exhaustion and 1% with high levels of disengagement (OLBI dimension that approximates the depersonalization dimension of the MBI) (Santos et al., 2018).

Personal Variables

A set of personal variables seems to be associated with different dimensions of burnout. Female and older teachers tended to have higher levels of emotional exhaustion (Gomes et al., 2006, 2010), while male, younger and single teachers had higher depersonalization levels (Gomes et al., 2006, 2010; Pinto et al., 2005). However, some studies did not find significant relationships between sex or age and the three dimensions of burnout (Ferreira & Martinez, 2012; Santos et al., 2018). Regarding professional experience, one study found positive correlations between emotional exhaustion and professional experience (Santos et al., 2018), although, in the study by Pinto et al. (2005), teachers in initial training exhibited higher levels of this burnout dimension.

The perception of inadequate training was also found to be a predictor variable of burnout, suggesting that teachers who perceived that they had access to higher quality training had lower levels of emotional exhaustion and higher levels of personal accomplishment (Pinto et al., 2005). Teachers who taught in public schools had the highest levels of emotional exhaustion (Ferreira & Martinez, 2012).

The stress and coping strategies variables also predicted the emotional exhaustion and depersonalization dimensions, while physical health and presenteeism were predictive variables of the emotional exhaustion dimension (Ferreira & Martinez, 2012; Gomes et al., 2006, 2010; Pinto et al., 2003, 2005; Santos et al., 2018). Finally, overall stress levels negatively predicted the personal accomplishment dimension (Gomes et al., 2010).

Organizational Variables

In the organizational context, the variables related to overwork and time pressure contribute the most to explaining emotional exhaustion (Gomes et al., 2006, 2012; Santos et al., 2018). In turn, the perception of inadequate disciplinary policies predicted high levels of depersonalization (Gomes et al., 2010). Gomes et al. (2006) also found that teachers with more hours of direct student contact tended to have lower levels of depersonalization.

In the school context, poor school climate, inadequate disciplinary policies, and bureaucratic and administrative work were the variables that most contributed to explaining high levels of personal accomplishment (Gomes et al., 2012; Pinto et al., 2005). However, Gomes et al. (2012) found a positive association between personal accomplishment and bureaucratic and administrative work.

Classroom Variables

In the classroom context, the number of students per class, different students' skills, and student misbehavior were the variables that best predicted emotional exhaustion (Gomes et al., 2006, 2010, 2012). The stress variables associated with misbehavior and different students' skills and motivations were also those that most contribute to explaining the depersonalization of teachers (Gomes et al., 2012; Santos et al., 2018). Personal accomplishment was predicted by the

number of classes and by teacher-student problems (Pinto et al., 2005). Two studies by Gomes et al. (2006, 2012) found a positive association between personal accomplishment and teachers' assessment of students' skills.

Discussion

The first objective of this systematic review was to determine the levels of burnout found in studies conducted with teachers of different educational levels. The average percentage of full burnout found in the different studies is considerable ($M = 9.5\%$). Nevertheless, the variability in the percentages found suggests that the prevalence of burnout in Portuguese teachers is not clear. Previous international studies reported different levels of teachers' burnout when compared to Portuguese samples. For example, Arvidsson et al. (2019) found 15% of Swedish teachers in their sample to report high levels of burnout. In turn, Li et al. (2020) found a prevalence of burnout of 53.4% in Chinese teachers. For instance, in a study conducted by Gil-Monte et al. (2011), 12% of the Brazilian sample teachers reported high levels of burnout. Nevertheless, a recent report on burnout across thirty-five European countries found that only 3,7% of burnout's variance is explained at the country-level (Schaufeli, 2018). This result reinforces the idea that other contextual variables (i.e., working conditions) play an important role in the prevalence of burnout. Additionally, similar to the results of other systematic reviews (e.g., García-Carmona et al., 2018), our results found that most studies (57.1%) did not complete information on the prevalence of burnout, preventing the determination of global levels of burnout among Portuguese teachers.

In addition, most studies included between two and four groups of teachers of different teaching cycles in their samples (from the 1st cycle of basic education to secondary education), without specifying or differentiating between the teaching levels. The available empirical data are scarce, not allowing generalization of the results. Therefore, the data provided do not allow the determination of the possible differences between teachers at different teaching levels. Considering that some studies suggest that the subjective experience of burnout differs depending on the teaching level (e.g., Buunk et al., 2007; Tatar & Horenczyk, 2003), it seems necessary to clarify this issue in future studies with Portuguese teachers.

The analyzed studies indicated that Portuguese researchers tend to consider the multidimensional nature of burnout, analyzing the impact of each dimension on different variables. Most international studies seem to adopt the same approach (e.g., Kokkinos, 2011) based on the idea that the overall results tend to be consistent with the emotional exhaustion dimension. Several studies argued that to understand the complexity of burnout better, it is beneficial to consider its different dimensions because they are predicted by different variables (e.g., Brenninkmeijer & VanYperen, 2003; Purvanova & Muros, 2010).

Two pertinent observations can also be made regarding the research methods of the analyzed studies. The first observation is that all studies adopted a quantitative cross-sectional design. This design limits the interpretations that can be made regarding the relationships between variables and does not allow an understanding of how burnout develops. The second observation is that all studies used self-report instruments. Although the MBI is the most widely used instrument in burnout research at the international level (cf. Boudreau & Nakashima, 2002), several criticisms have been made regarding its validity (e.g., Bria, 2014; Faúndez & Gil-Monte, 2009; Figueiredo-Ferraz et al., 2013; Shirom & Melamed, 2006). In addition, three of the analyzed studies used the General Survey of the MBI and not the Educators Survey

Variables Implicated in Burnout

The second objective of this study was to understand the type of variables considered in the exploration and understanding of the burnout phenomenon. The results suggest that the organization of variables into a three-dimensional structure – personal, organizational, and classroom – is adequate because it allows the accommodation of all identified variables.

The analysis of the results suggests inconsistencies regarding the role of several variables in burnout in teachers. The contradictory results or the absence of significant differences for different variables (e.g., sex, age, professional experience, bureaucracy) reinforce the need for further studies.

Bureaucracy was one of the variables most frequently analyzed in the studies. Although the negative impact of bureaucracy on the emotional well-being of teachers is mentioned in the literature (e.g., Rajendran et al., 2020), this variable seems to take on great importance in the Portuguese educational context. In addition, Gomes et al. (2012) found that bureaucratic and administrative work contributes positively to teachers' perception of personal accomplishment. This result is unexpected, and therefore, it is important to replicate the study. Nevertheless, in the organizational context, the results found by Gomes et al. on the role of working hours (2010) and the number of hours of direct student contact (2006) suggest that tasks directly related to teaching can be assumed to be protective variables against burnout and contribute to the emotional well-being and motivation of Portuguese teachers (prescribed work vs. real work).

In the classroom context, student misbehavior and the number of students per class seem to be the variables that most contribute to burnout levels in Portuguese teachers (Gomes et al., 2006, 2010; Pinto et al., 2005). Few studies in the literature evaluate the role of the number of students per class in teacher burnout. The relevance of this aspect may be associated with the specificities of the Portuguese context, although the number of students per class in Portugal is considered relatively low compared to that in classes in countries such as Chile or China (OECD, 2014). It is also possible that the number of students somehow confounds the variability in student knowledge. Given the difficulty of teaching students with very different knowledge levels, teachers may believe that they could achieve their goals with fewer students in the class.

Still, regarding the classroom context, difficulties in classroom management, which are associated with heterogeneous student skills, seem to negatively affect the emotional resources of teachers but positively affect their perception of personal accomplishment (Gomes et al., 2006, 2012), suggesting that the challenges associated with student learning themselves function as intrinsic motivators for Portuguese teachers.

Almost all studies also evaluated stress. There seems to be a clearer understanding in the literature of the difference between stress and burnout because the simultaneous evaluation of the two constructs is less frequent. In fact, the evaluation of stress and burnout may help to understand how burnout develops, but it is redundant for the identification of its implications and consequences. In the international literature, the distinction between stress and burnout seems clearer since the comparison between the two constructs is less frequent.

Conclusion

The present systematic review revealed the scarcity of studies on burnout in Portuguese teachers. Nevertheless, the results suggest that the incidence of burnout in Portuguese teachers is significant. It is necessary to conduct more studies that allow the determination of the extent of burnout and, consequently, the design of educational and psychological interventions to support teachers. Further studies may also clarify the role of different variables, such as sex, age, and teaching level, in burnout in Portuguese teachers.

The analysis of the variables associated with burnout suggests that the personal and organizational variables are the most frequently analyzed in studies on burnout in teachers and, therefore, are the variables that seem to contribute the most to explaining the high levels of different dimensions of burnout. Because teaching is a relational profession, in future studies, it will be interesting to deepen the understanding of the roles of various actors in the educational context (colleagues, students, and parents) in burnout in teachers.

This literature review is a valuable source of information for government leaders and school principals. Results found can guide strategic educational decisions at the most macro level that consider and protect teachers' mental health. Educational psychologists working in schools can benefit from these results to develop preventive interventions with and for teachers.

Recommendations

The results of this study offer several guidelines for further studies on burnout in Portuguese teachers. First, future studies should use instruments to assess burnout validated for the Portuguese population, favoring instruments that offer good psychometric qualities. Second, it would be pertinent to invest in studies with qualitative and longitudinal designs that allow to identify and explore the impact of specific variables of the Portuguese educational context on teacher burnout. Finally, future studies must differentiate between teaching levels to understand and characterize the experience of burnout among teachers.

Limitations

The inclusion and exclusion criteria of the systematic review may have resulted in the exclusion of high-quality studies with Portuguese teachers. For example, eleven academic papers (master's theses and doctoral dissertations) published since 2000 and five scientific articles that included preschool and/or higher education teachers in their samples were excluded from the analysis. Furthermore, due to the variability in the burnout levels and the scarcity of empirical data available in the analyzed studies, some caution in interpreting the results is recommended.

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