

Extent of the relationship between burnout syndrome and resilience on factors implicit to the teaching profession. A systematic review

Relación de efecto del Síndrome de Burnout y resiliencia con factores implícitos en la profesión docente. Una revisión sistemática

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Abstract

Introduction: The presence of burnout syndrome in the teaching field has grown exponentially over the last decade. This growth lays clear the negative influence of this syndrome within this professional group. In this sense, resilience is a factor that has become relevant in research since it is a useful tool for satisfactorily overcoming adversities in the occupational setting. The aim of this study is to identify the main variables associated with burnout syndrome and resilience in the field of education, in addition to establishing the effects of these relationships. **Methodology:** A systematic review of scientific outputs (Web of Science) published between 2016 and 2020 was carried out. This review focused on the relationship between resilience and burnout in the educational field, examining the effects of this relationship according to educational level. **Results:** Analysis was framed by the preferred reporting items for systematic review and meta-analysis (PRISMA) statement and a total of 25 papers were identified to provide the study sample. **Conclusion:** The study revealed the importance of the examined psychosocial constructs to the mental and social well-being of

teachers, as well as the influence of these constructs on the teaching-learning process.

Keywords: Burnout syndrome; resilience; teachers; systematic review; relationship; effect

Resumen

Introducción: La presencia del Síndrome de Burnout en el ámbito docente ha crecido exponencialmente en la última década. Ese crecimiento hace indiscutible la influencia negativa que esta está ejerciendo sobre este colectivo. En este sentido, la resiliencia es un factor que ha cobrado relevancia en las investigaciones, pues constituye una herramienta para hacer frente de forma satisfactoria a las adversidades en el ámbito laboral. Se pretende conocer las principales variables que se asocian con el Síndrome de Burnout y la resiliencia en el ámbito de la enseñanza, así como establecer los efectos de esas relaciones. **Metodología:** En la presente investigación se realizó una revisión sistemática de la producción científica (Web of Science) publicada en la franja temporal comprendida entre 2016 y 2019, centrada en los efectos y relación que ejerce la resiliencia y el Burnout en el ámbito docente, en los diversos niveles educativos. **Resultados:** Tras aplicar un sistema de análisis basado en la declaración *Preferred Reporting Items for Systematic Review and Meta-Analysis* (PRISMA), en el estudio se concretó una muestra de 25 artículos. **Conclusión:** se hizo evidente la importancia que estos constructos psicosociales tuvieron en el bienestar mental y social de los docentes, así como su influencia en el proceso de enseñanza-aprendizaje.

Palabras claves: Síndrome de Burnout; Resiliencia; Docentes; Revisión sistemática; Efecto de relación.

Introduction

The educational setting is currently experiencing a series of dizzying changes such as the expansion of new technologies and their incorporation in the classroom, new models of family structuring, legislative changes, and changes to the selection processes employed for gaining entry to this profession (Ballantyne and Retell, 2020; Scheepers, 2017). All of these changes and the speed at which they occur negatively impacts the teaching population as they increase the demands placed on it to meet these new challenges (Lambert et al., 2018; Vera-González, 2020).

In this sense, it serves to highlight that we currently find ourselves faced with an alarming situation in this occupational sector given that, as stated by the International Labor Organisation (ILT), it is experiencing an increase in mental health issues. Specifically, the ILT states that 1 in 10 workers suffer from conditions including stress, anxiety, depression, burnout. This places this type of condition as the second main cause of work absenteeism, sick days, early retirement and even hospitalisation (González-Valero *et al.*, 2019; Puertas-Molero *et al.*, 2018). Likewise, authors such as Howard and Hughes (2013) argue that teaching is one of the most strongly affected professions by this type of pathologies. Indeed, 25% of teachers describe their job as exhausting or extremely stressful (Hogan *et al.*, 2018)

In relation to that presented above, burnout syndrome can be understood as a factor that arises from the relationship between prolonged chronic stress and performance of the job itself (Maslach, 2003; Veronese and Pepe, 2014). It is a construct that is characterised by the emergence of feelings of exhaustion, cynicism, irritability, demotivation towards work, a lack of personal accomplishment, failing and wanting to run away (Sastre-Morcillo *et al.*, 2018). Authors such as Colomeischi (2015) and Guidetti *et al.* (2018) state that burnout occurs within the educational setting due to an excessive workload. This impinges upon individuals' private lives, direct contact with relatives, ability to assume greater responsibility and performance of management duties, in addition to their ongoing contact with students and colleagues (Aldrup *et al.*, 2018).

For this reason, it serves to mention that individual traits or conditions exist which can be used by each individual to face up to the demands of their work. This means that some individuals are more vulnerable than others to developing burnout syndrome. Indeed, whether or not this syndrome becomes manifest depends on the cognitive strategies and techniques possessed by an individual to resolve problems, in addition to the factors of resistance and protection they possess to satisfactorily cope with daily stressors (Vargas *et al.*, 2017; Drew and Sosnowski, 2019).

Resilience is found amongst the individual resources available to help prevent the development of burnout. Resilience is defined as the positive attitude of individuals when faced with complex situations which must be navigated through at certain moments in time. Thus, it represents the positive side of mental health. Likewise, resilient individuals perceive defeat as an opportunity for personal development (Santos, 2013). In this

sense, according to Vicente de Vera-García and Gabari-Gambarte (2019a), educational professionals who present greater levels of resilience possess the skills and abilities needed to satisfactorily take on their work, whilst also showing lower levels of stress. Nonetheless, less resilient individuals report tiredness and indifference towards their work. Resilience is a construct that contributes to reduced perceptions of stress, in addition to a reduced feeling of exhaustion at an emotional level (Richards *et al.*, 2016).

In accordance with García-Zuluaga *et al.* (2016), burnout syndrome emerges when individuals use strategies that are passive in nature to overcome stressors. Such strategies are based on emotions and avoidance as opposed to constructive techniques based on problem solving. Likewise, a wealth of scientific evidence exists which claims that emotions that are positive in nature such as happiness, assertiveness and optimism, positively influence the development of resilience (Barradas-Alarcón, 2018; Pulido and Herrera, 2018; Mazzaro, 2020).

Based on all of that presented, the main objective of the present study is to conduct a systematic review of literature pertaining to burnout and resilience in teachers at all educational levels. Specifically, the study seeks to identify the main variables associated with burnout syndrome and resilience in the teaching ambit, in addition to establishing the effects of these relationships.

Method

Having already presented the terms of burnout syndrome and resilience, a systematic review of scientific literature was performed. Selection processes were developed beforehand in accordance with the Spanish version of the PRISMA statement which describes the items to be considered when publishing systematic reviews and meta-analyses (Sotos-Prietos *et al.*, 2014). The aim of this was to establish the current state of the question and evolution of scientific production.

Procedure and search strategy

With regards to the procedure and search strategy, a search of scientific literature was conducted in the Web of Science (WOS) database ran by

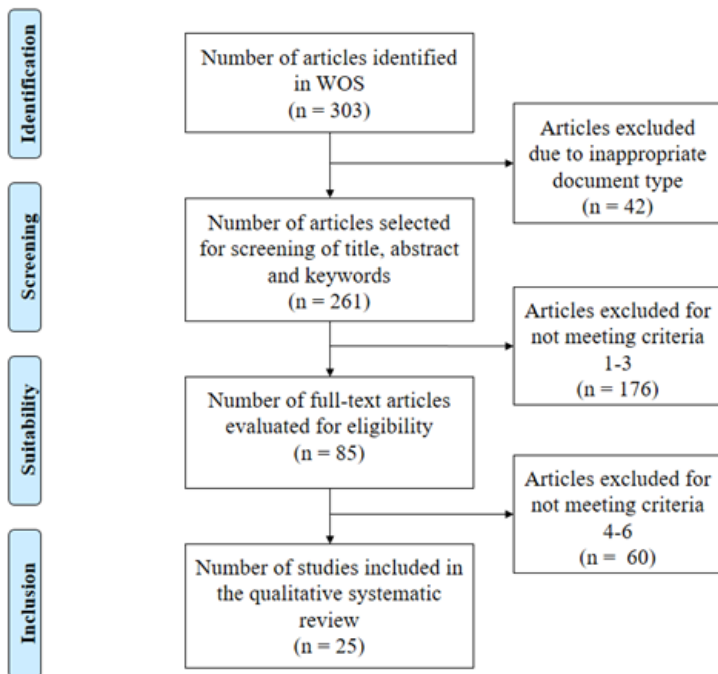
Clarivate Analytics. The search was performed during the first two weeks of February 2020. Concretely, all databases were considered and the time-period for the production of outputs was limited to the last four years (2016-2019). The key terms “burnout syndrome”, “resilien*” and “teacher” were used, alongside the Boolean operators of “and” and “or”. Terms were entered into the simple search function and the search was set to examine titles. Likewise, all research areas were considered. In this way, a total population of 303 scientific publications was garnered.

In order to determine the sample of articles that made up the basis of the study, the following inclusion criteria were applied. Criteria were established based on that presented by Sotos-Prietos *et al.* (2014) and Aguilera-Morales *et al.* (2018):

- (1) Articles published in Spanish or English and submitted to peer review.
- (2) Scientific studies that include the term burnout syndrome, resilience and teachers in their title, abstract or keywords.
- (3) Study population and sample focused on teachers at any educational level.
- (4) Scientific publications that employ a cross-sectional and/or longitudinal methodological design.
- (5) Studies using research instruments to collect participant information.
- (6) Research presenting significant outcomes and reporting conclusions which enable analysis of the study variables.

In order to apply inclusion criteria, a preliminary reading of the abstract and titles was performed. Following this, an in-depth reading of the full text was conducted with the aim of ensuring that conceptual, statistical and methodological criteria were met. The following figure presents study flow in consideration of inclusion and exclusion criteria. Finally, a total sample of 25 pertinent scientific articles were selected for qualitative synthesis (figure 1).

FIGURE I. Flow diagram of the articles valid for qualitative systematic review



Data extraction processes and description of selected articles

Data were extracted in relation to units of analysis and were coded as follows: (1) Author/s; (2) Year of publication; (3) Country; (4) Study population; (5) Methodological design; (6) Variables; (7) Instruments; (8) Effect of relationship; (9) Associated elements.

Table 1 presents the main characteristics of the articles that made up the basis of the systematic review:

TABLE I. Article characteristics

Authors (year)	Country	Stage/area (sample)	Design
Burnout syndrome			
Rabasa <i>et al.</i> (2016)	Spain	SE (N = 120)	T
Malander (2016)	Argentina	SE (N = 123)	T
Rodríguez-Mantilla & Fernández-Díaz (2017)	Spain	SE (N = 1291)	T
Solera-Hernández <i>et al.</i> (2017)	Spain	PE (N = 48)	T
Sánchez-Narváez & Velasco-Orozco (2017)	Mexico	PE & SE (N = 459)	T
Salgado-Roa & Leria-Dulčić (2018)	Chile	PE (N = 212)	T
Puertas-Molero <i>et al.</i> (2019)	Spain	UE (N = 1316)	T
Reyes-Oyola <i>et al.</i> (2019)	Colombia	PHE (N = 111)	T
Carlotto & Gonçalves-Câmara (2019)	Brazil	PE (N = 679)	T
Ptáček <i>et al.</i> (2019)	Czech Republic	PE (N = 2394)	T
Gallardo-López <i>et al.</i> (2019)	Spain	ECE, PE & SE (N = 1890)	T
Arias-Gallegos <i>et al.</i> (2019)	Peru	ECE, PE, SE & UE (N = 413)	T
Villaverde <i>et al.</i> (2019)	Mexico	PE & SE (N = 357)	T
Smetackova <i>et al.</i> (2019)	Czech Republic	PE (N = 2394)	T
Resilience			
Bowles & Arnup (2016)	Australia	PE & SE (N = 160)	T
Sadziak <i>et al.</i> (2018)	Poland	PHE (N = 198)	T
Baum <i>et al.</i> (2018)	Israel	PE (N = 49)	L
Forján & Morelatto (2018)	Argentina	PE (N = 66)	T
Li <i>et al.</i> (2019)	China	SE (N = 455)	T
Van Wingerden & Poell (2019)	Holland	PE (N = 174)	T
Fernandes <i>et al.</i> (2019)	Portugal	PE & SE (N = 59)	L
Chesak <i>et al.</i> (2019)	United States	UE (N = 36)	L
Burnout syndrome and resilience			
Richards <i>et al.</i> (2016)	United States	PE & SE (N = 415)	T
Burić <i>et al.</i> (2019)	Croatia	PE (N = 941)	T
Vicente de Vera-García & Gabari-Gambarte (2019b)	Spain	SE (N = 334)	T

Note 1: Early childhood education (ECE); Primary education (PE); Secondary education (ES); University education (UE); Physical education (PHE)

Note 2: Transversal/Cross-sectional (T); Longitudinal (L)

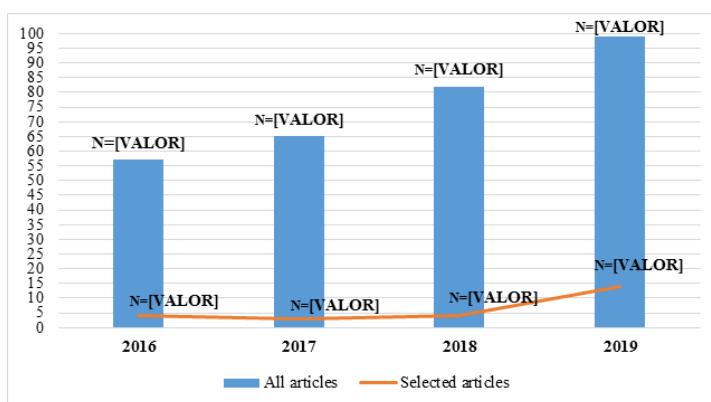
Results and discussion

Evolution of scientific outputs on burnout syndrome and resilience in teachers

In the present study, a review was performed of literature pertaining to the relationship between resilience and burnout syndrome in the teaching context. It serves to highlight that this work deals with a growing topic in the sense that various research studies have begun to argue that it concerns two constructs of paramount importance for the optimal performance of the teaching profession (Schussler, et al., 2018; Chesak, et al., 2019; Kutsyuruba et al., 2019; Ferreira de Brio-Mota et al., 2019; Jovanović et al., 2019).

Figure 2 presents the evolution of scientific output and of articles selected for the present study. The rising trend shown in the graph verifies the importance that these psychosocial factors have acquired within the teaching population in recent years, reaching a peak in 2019 (N = 99). Although burnout syndrome and resilience appear to be two well-known concepts in the field of physical-educational research and other contexts, the sample of articles selected for the present study emphasises the importance of continuing to conduct research and update the current state of teachers as a function of these variables given that few articles have been published overall.

FIGURE 2. Evolution of scientific output over the last five years (“teacher”, “burnout syndrome” and “resilien*”) and year distribution of selected articles.



Instruments for the evaluation of burnout syndrome and resilience. Effects of the relationship between variables implicit to the teaching context

Table 2 presents the instruments used to capture the study variables, alongside the effects of the relationships found between elements. In order to calculate effect sizes, methods proposed by Cohen (1988) and Rosenthal (1994) were followed, in which Cohen's *d* was calculated as the product correlation produced from the difference between the mean and the *r*-index. With regards to Cohen's *d*, the effect size of observed relationships was defined as small ($d = 0.2$), medium ($d = 0.5$) or large ($d = 0.8$). In the same way, the *r*-index was defined as small ($r = 0.1$), medium ($r = 0.3$) or large ($r = 0.5$).

TABLE 2. Evaluation instruments and effect of the relationships observed between variables

Study	Instrument	Variables	ES (d and r)	Relationship effect	Element
Burnout syndrome					
Rabasa <i>et al.</i> (2016)	CESQT	PW	$r = 0.250$	Small	ITA
		FG	$r = 0.240$	Small	
Malandar (2016)	MBI	EE	$r = -0.269$	Small	Self-realisation
		C	$r = -0.232$	Small	
		PA	$r = 0.542$	Large	
Rodríguez-Mantilla & Fernández-Díaz (2017)	MIBST	EE	$r = -0.469$	Medium	Teacher-student relationship
		C	$r = -0.450$	Medium	
		INEF	$r = -0.252$	Small	
Solera-Hernández <i>et al.</i> (2017)	CBP-R	EE	$d = 0.000$	Null	Comparison between CP and CPV
		C	$d = 0.200$	Small	
		PA	$d = 0.293$	Small	
Sánchez-Narváez & Velasco-Orozco (2017)	MBI-Ed	EE	$r = 0.440$	Medium	SA
		C	$r = 0.176$	Small	
		PA	$r = -0.288$	Small	
Salgado-Roa & Leria-Dulčić (2018)	CESQT	IFW	$d = 0.570$	Medium	Differences between males and females
		IND	$d = 0.480$	Small	
		FG	$d = 0.480$	Small	

Puertas-Molero <i>et al.</i> (2019)	MBI	EE	$r = 0.322$	Medium	EAT
		C	$r = -0.182$	Small	ECL
		PA	$r = 0.501$	Large	ERE
Reyes-Oyola <i>et al.</i> (2019)	CESQT-PE	PW	$d = 0.508$	Medium	Differences between males and females
Carlotto & Gonçalves-Câmara (2019)	SBI	IFW	$r = 0.231$	Small	Autonomy
		PW	$r = -0.173$	Small	
Ptáček <i>et al.</i> (2019)	SMBM	BS	$r = 0.701$	Large	DS
Gallardo-López <i>et al.</i> (2019)	CBP-R	C	$d = 0.261$	Small	Comparison between ECE and PE
			$d = 0.625$	Medium	Comparison between ECE and SE
			$d = 0.446$	Small	Comparison between PE and SE
Arias-Gallegos <i>et al.</i> (2019)	MBI	EE	$d = 0.141$	Null	Comparison between ST and UL
		C	$d = 0.315$	Small	
		PA	$d = 0.817$	Large	
Villaverde <i>et al.</i> (2019)	CESQT	PW	$r = -0.425$	Medium	Expressive sociability
		IND	$r = -0.293$	Small	
		FG	$r = -0.270$	Small	
Smetackova <i>et al.</i> (2019)	SMBM	BS	$d = 0.835$	Large	Self-efficacy
Resilience					
Bowles & Arnup (2016)	RSA	R	$r = 0.540$	Large	CWNE
Sadziak <i>et al.</i> (2018)	ERS	R	$d = 0.610$	Medium	Comparison between special and ordinary schools
Baum <i>et al.</i> (2018)	CD-RISC (10)	Workshop intervention	$d = 0.550$	Medium	R
Forján & Morelato (2018)	ERD	MPA	$d = 0.422$	Medium	Social context
		PRC	$d = 0.662$	Medium	
		SEL	$d = 0.021$	Null	
		PSU	$d = 0.604$	Medium	

Li et al. (2019)	TRS	R	r = 0.787	Large	CMT
			r = 0.800	Large	SSE
			r = 0.818	Large	AFW
Van Wingerden & Poell (2019)	PCQ	R	r = 0.350	Medium	Work commitment
Fernandes et al. (2019)	TRS	PLP	d = 1.310	Large	R
Chesak et al. (2019)	CD-RISC	SMART program	d = 0.307	Small	R
Burnout syndrome and resilience					
Richards et al. (2016)	MBI & CD-RISC	R	r = -0.240	Small	RC
			r = -0.260	Small	RMB
			r = -0.320	Medium	WO
Burić et al. (2019)	OLBI & BRS	R	r = -0.490	Medium	Emotions
			r = -0.620	Large	BS
			r = -0.530	Large	BS symptoms
Vicente de Vera-García & Gabari-Gambarte (2019b)	MBI-GS & CD-RISC	TOI	r = 0.370	Medium	EE
		PCOM	r = 0.310	Medium	PA
		PAC	r = 0.340	Medium	PA
		CSP	r = 0.610	Large	EE
		TAD	r = -0.580	Large	EE

Note 1: Research/reference used in the systematic review (study); Burnout syndrome and/or resilience evaluation tool (instrument); Main aspects studied (variables); Effect size (ES); Aspects with which the main study variables are related (element).

Note 2: Shirom–Melamed Burnout Scale (SMBM); Stress Coping Style Questionnaire (SVF 78); Burnout Syndrome Evaluation Questionnaire (CESQT); Maslach Burnout Inventory (MBI); Teacher Burnout Questionnaire (CBP-R); Spanish Burnout Inventory (SBI); Burnout Syndrome Evaluation Questionnaire for Physical Education (CESQT-PE); Burnout Potential Inventory (IBP); Perceived Stress Scale (PSS); Maslach Burnout Inventory for Physical Education (MBI-Ed); Measurement Instrument for Burnout Syndrome in Teachers (MIBST); Maslach Burnout Inventory-General Survey (MBI-GS); Connor-Davidson Resilience Scale (CD-RISC); Oldenburg Burnout Inventory (OLBI); Brief Resilience Scale (BRS); Teacher Resilience Scale (TRS); Resilience Process Questionnaire (RPQ); PsyCap Questionnaire (PCQ); Questionnaire for the Evaluation of Resilience (CER); Teacher Resilience Scale (ERD); Ego Resiliency Scale (ERS); SV-RES Resilience Scale (SV-RES); Adult Resilience Scale (RSA).

Note 3: Illusion for work (IFW); psychological wear (PW); feelings of guilt (FG); indolence (IND); inefficacy (INEF); burnout syndrome (BS); Resilience (R); Meaningful participation (MPA); Prosocial conduct (PRC); Self-esteem and learning (SEL); Perceived support (PSU); professional learning program (PLP); stress management and resiliency training (SMART); trust in one's own instincts (TOI); personal competence (PCOM); positive acceptance of change (PAC); control and spirituality (CSP); tolerance for adversity (TAD).

Note 4: Inclination towards absenteeism (ITA); emotional exhaustion (EE), cynicism (C); personal accomplishment (PA); symptoms of anxiety (SA); depressive symptoms (DS); school teachers (ST); university lecturers (UL); emotional attention (EAT); emotional clarity (ECL); emotional repair (ERE); coping with negative emotions (CWNE); commitment and motivation for teaching (CMT); sense of self-efficacy (SSE); accomplishment from work (AFW); role conflict (CR); role ambiguity (RMB); work overload (WO).

Relationship of burnout syndrome with psychosocial and sociodemographic aspects of teaching professionals

A study conducted by Puertas-Molero *et al.* (2019) demonstrated that personal accomplishment was related with emotional repair, with this association producing a large effect size ($r = 0.501$). This time with a medium effect size ($r = 0.322$), emotional attention and emotional exhaustion were also directly related. In contrast, only a small effect size ($r = -0.182$) was found to show that cynicism in university teachers is indirectly linked to emotional clarity. Also, with small effect sizes, psychological wear ($r = 0.250$) and feelings of guilt ($r = 0.240$) have been shown to be associated with indices of absenteeism from work amongst teachers (Rabasa *et al.*, 2016). In a study conducted by Ptáček *et al.* (2019), a large effect size ($r = 0.701$) was demonstrated for the relationship between burnout syndrome and depressive symptoms in primary school teachers. A study carried out with primary and secondary school teachers by Sánchez-Narváez and Velasco-Orozco (2017) outlined that symptoms of anxiety were conditioned by emotional attention (medium effect; $r = 0.440$) and cynicism (small effect; $r = 0.176$), with the opposite occurring in relation to personal accomplishment (small effect; $r = -0.288$).

Further, Arias-Gallegos *et al.* (2019) revealed that university teachers had higher levels of cynicism than early learning, primary school and secondary school teachers (small effect; $d = 0.315$), with this latter group of teachers also perceiving themselves to be more accomplished in their work than their university counterparts (large effect; $d = 0.817$). According to Gallardo-López *et al.* (2019), whilst greater cynicism exists amongst primary school teachers than early learning teachers (small effect; $d = 0.261$), these differences are greater when compared with university lecturers (medium effect; $d = 0.625$). Along the same lines, university lecturers also report being more cynical than secondary school teachers. Based on the study conducted by Solera-Hernández *et al.* (2017), professionals who deliver teaching in public centres report higher levels of cynicism ($d = 0.200$) and personal accomplishment ($d = 0.293$) than those who teach in coordinated entities (these entities in Spain receive a mix of state and private funding), although the effect size was small.

According to Villaverde *et al.* (2019), the personality factor expressive sociability is indirectly related with psychological wear (medium effect; $r = -0.425$), indolence (small effect; $r = -0.293$) and feelings of guilt (small

effect; $r = -0.270$). In the same sense, Carlotto and Gonçalves-Câmara (2019) demonstrated autonomy to be positively associated with illusion to work in the teaching profession (small effect; $r = 0.231$) and negatively associated with psychological wear (small effect; $r = -0.173$). Smetackova *et al.* (2019) found that teachers who did not present burnout syndrome reported higher levels of self-efficacy than those presenting this pathology (large effect; $d = 0.835$). Similarly, Malander (2016) established a small effect size for the indirect relationship between emotional exhaustion ($r = -0.269$) and cynicism ($r = -0.232$), whilst a large effect size ($r = 0.542$) was uncovered between high levels of personal accomplishment and greater self-realisation.

Another aspect worth commenting on pertains to a study conducted by Salgado-Roa and Leria-Dulčić (2018). In this study, females reported greater illusion for the teaching profession, with a medium effect size emerging for this comparison ($d = 0.570$), whilst males reported higher levels of indolence ($d = 0.480$) and feelings of guilt ($d = 0.480$), although the effect size was small. In a similar sense, Reyes-Oyola *et al.* (2019) highlighted, through a medium effect size ($d = 0.508$), that female Physical Education teachers displayed greater psychological wear than their male counterparts. Rodríguez-Mantilla and Fernández-Díaz (2017) examined the dimensions of burnout according to teacher-student relationships. Concretely, more positive relationships between these components were associated with lower levels of emotional exhaustion (medium effect; $r = -0.469$), cynicism/depersonalisation (medium effect; $r = -0.450$) and indifference (small effect; $r = -0.252$).

Based on the effects attributed to the established relationships, studies conducted within the context of primary education, such as those reported by Carlotto and Gonçalves-Câmara (2019) and Ptáček *et al.* (2019), conclude that this profession is characterised by high levels of stress which, over time, can develop into burnout. Likewise, considerations of participant sex highlight that males tend to demonstrate greater emotional exhaustion, whereas females suffer more physical exhaustion (Sánchez-Naváez and Velazco Orozco, 2017). In the same way, it has been revealed that greater teaching experience corresponds to lower levels of burnout (Solera-Hernández *et al.*, 2017). This may be due to the fact that teachers learn over time how to manage and resolve the conflictive situations they are faced with on a daily basis.

A study developed by Salgado-Roa and Leira-Dulčić (2017) highlighted that personality factors were tightly linked to the emergence of this pathology. Indeed, they reported that individuals who were grouped according to insecure personality types presented high levels of indolence and blame and, consequently, were more predisposed towards developing burnout. In contrast, those who presented with an enterprising personality type also showed greater illusion for their work and lower feelings of guilt.

With regards to secondary school education, studies such as that conducted by Rabasa et al. (2016) can be mentioned as indicating that an excessive work load is intimately related with psychological wear and less illusion for work. This leads to the emergence of feelings of guilt and, subsequently, burnout syndrome. Likewise, authors such as Gallardo-López et al. (2019) and Reyes-Oyola et al. (2019) argue that higher levels of cynicism and emotional exhaustion exist within secondary school teachers than primary school or early learning teachers. This suggests that age of students influences the emergence of this pathology given that adolescent students may present certain behavioural characteristics that are difficult to manage from a socio-educational perspective (Villaverde et al., 2019). Based on that presented, Smetackova et al., (2019) reported that emotional exhaustion was intimately related with negative coping when faced with conflictive situations. In the same way, Rodríguez-Mantilla and Fernández-Díaz (2017) demonstrated the importance of taking care of interpersonal relationships at educational centres with the aim of ensuring teacher wellbeing and the quality of teaching-learning processes and, ultimately, preventing burnout.

Finally, authors such as Puertas-Molero et al. (2018) have indicated that a direct relationship exists between stress and burnout syndrome within the university educational stage. When such stress is experienced over a prolonged period of time, feelings of rejection towards the profession can arise as a response to excessive tension and the need to resolve conflicts which carry with them attentional problems (Bedoya et al., 2017; Arias-Gallegos et al., 2019). Likewise, a study developed by Rodríguez-Flores and Sánchez-Trujillo (2018) argued that a key factor for developing this pathology pertains to the fact that many teaching professionals have not studied specifically to exercise this profession. This can ultimately result in feelings of job dissatisfaction and, over time, the development of burnout.

Relationship of resilience with psychosocial and sociodemographic aspects of teaching professionals

A study conducted by Bowles and Arnup (2016) demonstrated a positive relationship with a large effect size ($r = 0.540$) between coping with negative emotions and the capacity to overcome adversity by considering it to be a challenge. Another observed direct association with regards to resilience, with a medium effect size ($r = 0.350$), was found with commitment to work (Van Wingerden and Poell, 2019). Forján and Morelato (2018) proposed a study to examine different factors of resilience in teachers exercising in contexts within which they were and were not exposed to vulnerability. As shown through a medium effect size, teachers exercising in vulnerable social contexts presented higher levels in the factors of resilience denominated meaningful participation ($d = 0.422$), prosocial conduct ($d = 0.662$) and perceived support ($d = 0.604$). Li *et al.* (2019) showed that resilience was a predictive factor, with a large effect size, of commitment and motivation towards teaching ($r = 0.787$), sense of self-efficacy ($r = 0.800$) and accomplishment at work ($r = 0.818$). Sadziak *et al.* (2018) established differences in resilience between Physical Education teachers exercising in special education centres and standard educational centres. A medium effect size ($d = 0.610$) was established in which Physical Education teachers working at special schools obtained higher scores for resilience than those working at conventional schools.

In line with that mentioned above, Baum *et al.* (2018) have shown that an intervention employing coping workshops improves resilience (medium effect; $d = 0.550$). In a similar way, an intervention based on six modules which worked on the capacity to overcome adversity, relationship development, emotional wellbeing, stress management, affective learning and classroom management led to a large positive effect ($d = 1.310$) on teacher resilience (Fernandes *et al.*, 2019). Along similar lines, Chesak *et al.* (2019) carried out an intervention with teachers via the “Stress Management and Resiliency Training” (SMART) program. This comprised the essential components of attention training and development of a resilient mentality. Through this program, an increase in resilience was produced associated with a small effect size ($d = 0.307$).

Given the aforementioned, it is important to highlight that resilience has emerged as a key factor for the teaching population in diverse research

studies (Sadziak *et al.*, 2018; Fernandes *et al.*, 2019; Van-Wingerden and Poell, 2019). Indeed, Baum *et al.*, (2018) points to the need to incorporate this factor into teacher training given that, as stated by Bowles and Arnup (2016), individuals who tackle adverse situations in an adaptive and emotional stable way, are flexible to change, and open and accepting of new experiences, manage to reduce the fatigue and exhaustion caused by their profession. Further, Forján and Morelato (2018) and Li *et al.* (2019) point to the importance of teamwork and support as protective means against stress and promoters of resilience. Díaz-Sánchez and Barra-Almagia (2017) emphasise that the dispositional characteristics of resilience encourage the development of job satisfaction, regardless of the adversity faced at work due to the intensity of duties, lack of rest and resources, feelings of abandonment, stressful factors, and technical, social and mental health obstacles, amongst others (Arnup and Bowles, 2016; Salerni and Vaccarelli, 2019). For this reason, it serves to highlight that intervention programs constitute effective tools for improving anxiety, stress, happiness, satisfaction and quality of life. An example of this comes from the intervention by Chesak *et al.* (2019) which produced positive outcomes with regards to resilience.

Relationship between burnout syndrome and resilience in the teaching context

Understanding resilience as a protective factor against chronic stress in teachers (Vicente de Vera García and Gabari-Gambarte, 2019b), a medium strength and positive relationship is shown between personal accomplishment and positive acceptance of change ($r = 0.340$) and personal competence ($r = 0.310$). A similar relationship is found between emotional attention and trust in one's instincts ($r = 0.370$). Further, emotional attention has been shown to have a strong and positive relationship with control and spirituality ($r = 0.610$), with an indirect relationship emerging with tolerance for adversity ($r = -0.580$).

Resilience has been demonstrated to have a tight relationship with the role assumed by teachers within their teaching activity, with this role potentially having implications related with stress pathologies. A study conducted by Richards *et al.* (2016) exposed the negative relationship between resilience and role conflict (small effect; $r = -0.240$), role

ambiguity (small effect; $r = -0.260$) and work overload (medium effect; $r = -0.320$) in the ambit of teaching. Likewise, Burić *et al.* (2019) proposed a predictive model in which resilience was negatively associated with negative emotions (medium effect; $r = -0.490$), burnout syndrome (large effect; $r = -0.620$) and related symptoms (large effect; $r = -0.530$).

When considering studies that worked to develop resilience and burnout syndrome in the educational context, it serves to highlight that Richards *et al.* (2016) reported outcomes that outlined that greater feelings of trust in oneself, together with the capacity to consider adversity as a challenge, lead to better indices of burnout. This points to resilience as an essential aspect of psychological and social wellbeing in teachers, in this way, promoting better quality education (Burić *et al.*, 2019). In this sense, a study conducted by Vicente de Vera-García and Gabari-Gambarte (2019a) produced evidence that specific personality factors make individuals more or less susceptible to the development of pathologies such as burnout. Resilience stands out within the educational context as acting to decrease vulnerability to burnout, making it essential for ensuring a quality education (Goncalves, 2017; Alarcón, 2018; Vicente de Vera-García and Gabari-Gambarte, 2019b).

Conclusions

It serves to highlight that the evaluation and treatment of burnout syndrome and resilience in the teaching profession constitutes a topic of growing interest in scientific research due to the need to better understand its role in relation to educational professionals.

It can be concluded that medium and high levels of burnout are present at all educational levels. Further, burnout trends appear to be increasing with this having negative repercussions on the mental health of these professionals and on teaching-learning processes. Nonetheless, resilience may be a key factor for addressing this situation. Indeed, evidence is beginning to emerge that teachers who present high levels of resilience manage to satisfactorily tackle the difficult situations they are faced with at work. Specifically, this is achieved by reframing potentially threatening situations into personal challenges and growth. Main research outcomes emphasise gender differences and the relationship between psychological and social wellbeing, job satisfaction, inter-professional relationships,

context, psychosocial factors such as emotional intelligence, motivation and self-esteem, and educational stage.

Within the scope of the present systematic review, the importance of continuing research is shown, alongside the need to continually update the state of relevant knowledge in relation to teachers as a function of the variables of burnout syndrome and resilience. This is important given that the topic has received little research attention. In this way, the present study reiterates the importance of developing programs that favour the development of resilience in teachers. This will contribute to reductions in levels of stress, anxiety and burnout, in this way, improving the psychosocial and occupational wellbeing of teachers.

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