Teacher Burnout: A Review of Sources and Ramifications

Afsaneh Ghanizadeh[1*] and Safoura Jahedizadeh[1]

[1]*Department of English, Imam Reza International University, Mashhad, Iran.*

Authors' contributions

This work was carried out in collaboration between the two authors. Author AG supervised the work, decided upon and provided the sources, and concluded the study. Author SJ carried out the categorizations presented in the study and wrote the first draft of the manuscript.

Review Article

ABSTRACT

Burnout is a syndrome which results from a form of chronic stress associated with the frequent interactions and close contact with others. Teaching as an interactive and stressful profession is highly prone to burnout. Plethora of studies in the realm of teacher burnout demonstrated that the syndrome is under the influence of different factors and in turn can create various consequences. The objective of the present study is to complement and encapsulate the previous research on teacher burnout by providing an updated review on the syndrome with a specific focus on language teachers. Data from 30 studies published in Elsevier, Sage, Taylor & Francis, Wiley, and Springer were coded based on a coding scheme adapted from previous systematic reviews. The studies were broadly classified into those conducted in the realm of general education and language education. The focus of review pivoted around causes and consequences of teacher burnout. The analysis demonstrated the multidimensional nature of teacher burnout caused by a host of variables and causing a multitude of ramifications at both individual and organizational levels. Based on these findings, some recommendations and strategies for mitigating teacher burnout were presented.

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Corresponding author: E-mail: ghanizadeafsane@yahoo.com;

1. INTRODUCTION

The notion of burnout was proposed by Freudenberger, [1]. He applied this notion to refer to a fixed job-related stress that workers experienced. Burnout encompasses a broad range of psychological factors such as low self-esteem, lack of self-confidence, and physiological factors such as muscle pains [2]. Although there is not yet an acceptable definition for burnout [1-3], the idea is considered as a response to the persistent emotional damage and chronic stress [4]. A prevailing definition conceptualizes burnout as follows: burnout is as a state of physical, emotional and mental exhaustion caused by long-term involvement in situations that are emotionally demanding or stressful [5]. It comes about when exhaustion replaces feeling energized, cynicism replaces being hopeful and involved, and ineffectiveness replaces feeling efficacious. Burnout developmental stages can be described as following: when professionals do not find opportunities to receive agreement about their functioning or to identify their job expectations within their community, they feel powerlessness which brings a sense of meaningless [1]. As a consequence, this person seems to be reluctant to be engaged in social interactions in his professional community (isolation) and feel doubtful that his involvement in their organizational role is in conformity with his self-image (estrangement).

Burnout syndrome is frequently used in order to account for physical and psychological issues related to human service professionals such as teachers, nurses, social workers, etc. Teaching is one of the most hotly-debated domains prone to burnout. According to a leading voice in teacher burnout research, teacher burnout is a multidimensional construct with three related constructs: emotional exhaustion, depersonalization, and diminished personal accomplishment [6]. These three dimensions of burnout are generally used as the basis for any discussion on teacher burnout, along with the educator version of the MBI (Maslach Burnout Inventory) as the standard measurement tool [7]. Emotional Exhaustion occurs when teachers feel their emotional resources are depleted and overextended by the contact with other people, particularly, their students. Depersonalization refers to impersonal and even dehumanized perception of others. Reduced personal accomplishment refers to a decline in professional competence and effectiveness [7].

Theoretical and empirical research on teacher burnout demonstrated that it lies on a host of factors. In an attempt to present possible sources of teacher burnout, the existing literature on teacher burnout was reviewed and concluded that there are three potential sources as: individual, organizational, and transactional sources [8]. Studies identifying sources of burnout provided the answers to "who" experiences burnout, while studies identifying sources of burnout as social and organizational factors provided the answers to "what" makes teachers burnout.

In another thorough classification, three major categories in teacher burnout were considered: Background variables such as age, gender, educational level, tenure, contract status, etc [9]. Organizational factors such as role conflict, role ambiguity, work overload, classroom climate; and personality factors like locus of control and self-esteem.

In a similar vein, consequences of teacher burnout are numerous at both the individual and contextual levels. Individual consequences of burnout include physiological, psychological and psychosocial problems resulting in low job satisfaction accompanied by resentment, frustration, boredom, irritability, anger, and helplessness [10]. In addition to personal consequence of burnout, substantial costs are also incurred by the school including teacher absenteeism, turnover, career change, mental/physical health claims, attrition and early retirement [11]. These ramifications in turn have definite bearings on students' involvement and motivation, and ultimately on the entire school community and educational system.

In order to have a deeper understanding of teacher burnout and in order to crystallize it and consequently arrive at a precautionary perspective, it was emphasized that a working model may be a helpful approach. In this model, one can rightfully define burnout as a factor contributing both to teachers' and students' behavior and experience. But burnout is also represented as being determined by numerous factors, from qualities in the social environment in general and the nature of the work itself in specific. Furthermore, the personal characteristics of teachers and their students are

of crucial importance. It was also noted that the role of teaching can be attached theoretically to the workplace ecology and, additionally, to social and economic conditions as macro-analytic factors [12].

As it can be seen, teacher burnout is associated with a multitude of causes and consequences. Since the popularization of teacher burnout [6], numerous studies have been conducted to address the syndrome from different perspectives. Similarly, a number of review studies have addressed teacher burnout [9, 8]. These reviews encompassed teachers of various disciplines and levels. Nevertheless, to the researchers' best knowledge, no documented review study to date has been carried out with a specific focus on language teachers (either L2 or foreign language teachers). Due to the demanding job of these teachers in having to cope with bilingual and bicultural contexts, it is believed that language teachers are exceedingly susceptible to teacher burnout [13]. So this necessitates doing a study review on teacher burnout by subsuming studies on L2 teachers. Furthermore, previous reviews on teacher burnout date back to at least five years ago. Since there have been a substantial number of recently published studies on teacher burnout, it seems essential to do a study review to obtain a deep and more comprehensive understanding of the recent developments in the domain of teacher burnout.

2. METHOD

2.1 Search Procedures and Criteria for Inclusion

The current study reviews a thorough collection of recent studies on teachers' burnout in the area of education. The research encompasses amalgamation of quantitative, qualitative and mixed methods studies investigating teacher burnout. These studies were published between 1986 and 2014.Out of 37 studies 30 articles which met the following criteria were investigated for this review: 1. Teachers' burnout was one of the main variables of the study. 2. The context of the study was general or second/ foreign language learning (i.e. in the area of education) and 3. Factors influencing burnout and factors influenced by burnout were described.

Studies that were book chapters, master or doctoral dissertations were not included in this synthesis, nor were the studies *not written in English.* Finally, *a* total of 31 articles from the

following journals were selected for this review: *Educational Research for Policy and Practice, The Spanish Journal of Psychology, British Journal of Educational Psychology, Teaching and Teacher Education, Journal of Applied Social Psychology, Psychology in Spain, Teaching and Teacher Education, Educational Psychology Review, Personality and Individual Differences, Australian Journal of Educational & Developmental Psychology, International Journal of Psychology and Psychological Therapy, Journal of International Education Research, H. U. Journal of Education, Educational Research Quarterly, School Psychology International, Journal of Education and Practice, Social Psychology of Education, International Journal of Educational Management, and Mind, Brain, and Education.* These journals are published by publications such as, Sage, Elsevier, Taylor and Francis, Springer, Wiley, and Oxford University Press.

2.2 Coding and Analysis

Once selected, the studies were coded based on a coding scheme (Table 1) used in a number of previous reviews [14]. To analyze the studies, the characteristics of each study were coded and classified into several categories related to the research objectives. The purpose of a review is to summarize the existing research on a specific topic and to identify the issues which need further investigation [15]. Consequently, this review provides in-depth knowledge about teachers' burnout.

To perform a systematic review, selected studies were divided into two categories: the general education and language education. Second, there were two other main subcategories: the factors or variables which influence teachers' burnout and the effectiveness of teachers' burnout on language teaching and learning.

3. RESULTS AND DISCUSSION

After using several strategies, 30 studies published between 1986 and 2014 were selected for this review. These studies were classified into two categories: a general course and English as a second/ foreign language to compare levels of burnout between language teachers and teachers of a general course education. Table 2 displays the studies done in the domain of general.

Table 3 is the summary of the studies on English teachers (as a second or foreign language)

Table 1. Coding scheme for primary studies

1.	**Publication**
a.	Name of the article and authors
b.	Year of publication
2.	**Context of the study**
a.	General education/ language education
b.	Number of participants
c.	Participants' age (average)
d.	Participants' gender
e.	Educational institution (in which teachers have taught)
3.	**Country**
4.	**Effectiveness (cause or consequence)**
5.	**Data Analysis**

Another categorization consists of two main groups: 1. Factors affecting teachers' burnout (Tables 4,5,6,7) and 2. Consequences of burnout (Tables 8,9,10,11). To have a more detailed view on this issue each category is divided to 4 subcategories: factors leading to emotional exhaustion (Table 4), factors leading to depersonalization (Table 5), factors which cause reduced personal accomplishment (Table 6) and factors causing burnout in general, not specified in the article (Table 7). Factors which are influenced by burnout are classified as the previous category. Table 8 shows consequences of emotional exhaustion. Table 9 demonstrates consequences of depersonalization and Table 10 is related to results of reduced personal accomplishment. There were some studies which didn't indicate consequences of each dimension of burnout, but burnout as a general cause (Table 11).

3.1 General Characteristics of the Selected Studies

The selected studies for this review encompass research carried out between 1986 and 2014. The research was conducted in two educational contexts: kindergarten, elementary, secondary, high school and university which are all related to public education (83.3 %) and English language institutes where English is taught in private schools (16.6 %). As the indices suggest, just 5 studies out of 30 selected articles were conducted to predict burnout levels of English language teachers.

For data collection, two kinds of instrument were used to measure burnout among teachers: questionnaire and interview, although the most widely used tool for evaluating levels of burnout was questionnaire (96.6 %).

3.2 Factors Affecting Burnout

3.2.1 Factors affecting emotional exhaustion (10 studies, Table 4)

Many factors influence this dimension of burnout. These factors are as follows: Student misbehavior, demonization, lack of shared decision making, workload, pedagogical barriers [16], Self-efficacy [17,21], Unpleasant emotions from judgments teachers make regarding student behaviors [8], Role overload, work pressure, classroom environment and self-esteem [23], personality types and emotional intelligence (neuroticism and extroversion) [41], Changes in teachers' perceptions of classroom overload, students' disruptive behavior and autonomous motivation [26], disrespect [30], Teaching-related and non-teaching-related workload (autonomy and paperwork) [32] and age [37].

As these studies show, students' disruptive behavior is the most important factor in predicting emotional exhaustion among teachers.

3.2.2 Factors affecting depersonalization (7 studies, Table 5)

Causes of second dimension of burnout of teachers are mentioned here:

Lack of shared decision making and workload [16], Self-efficacy [17,18,21], emotional exhaustion, role conflict, self-esteem and school environment [23], personality types and emotional intelligence (intrapersonal scale of emotional intelligence and agreeableness) [41] and disrespect and lack of sociability [30].

Self- efficacy can affect three dimensions of burnout but is one of the most significant factors which lead to depersonalization

3.2.3 Factors affecting reduced personal accomplishment (8 studies, Table 6)

This level of burnout is influenced by the following factors as were mentioned in selected studies:

Student misbehavior and demonization [16], self-efficacy [17,18], teaching efficacy, self-esteem and depersonalization [23], personality types and emotional intelligence (interpersonal scale and conscientiousness) [41], lack of sociability [30], extraversion, agreeableness, conscientiousness and openness to experience [43], lack of received mindfulness intervention [38]

Table 2. Studies on burnout of teachers teaching a general course

Code	Publication	Educational institution	Country	Data analysis
2	Doménech and Gómez (2010) [16]	primary and secondary school	Spain	Correlation and multiple regression
3	Evers, Brouwers and Tomic (2002) [17]	Study-home system	Netherlands	Regression
4	Brouwers and Tomic (2000) [18]	secondary school	Netherlands	SEM
5	Brouwers, Evers and Tomic (2001) [19]	secondary school	Netherlands	CFA and sequential chi-square
6	Manassero, Buades, Torrens , Ramis, Vázquez and Ferrer (2006) [20]	nursury and secondary school	Spain	Correlation and multiple regression
8	Skaalvik and Skaalvik (2010) [21]	elementary and middle school	Norway	SEM and Factor analysis
9	Chang (2009) [8]	K12		
10	Garcia, Munoz and Ortiz (2005) [22]	Special and elementary	Spain	Multiple linear regression
11	Dorman (2003) [23]	private school	Queensland	LISREL analysis with post hoc modifications
12	López, Santiago, Godás, Castro, Villardefrancos, and Ponte (2008) [24]	Secondary school	Spain	Pearson correlation and multiple regression
13	Mukundan (2011) [25]	primary, secondary and tertiary school	Malaysia	T-test, one-way ANOVA, Chi-square and correlation
15	Fernet, Guay, Senécal, and Austin (2012) [26]	elementary and high school	Canada	SEM
17	Schwab, Jackson, and Schuler (1986) [27]	elementary and secondary school	New Hampshir	Multiple regression
18	Bibou-Nakou, Stogiannidou, and Kiosseoglou (2012) [28]	Elementary school	Northern Greece	Spearman correlation
19	Parker, Martin, Colmar and Liem (2012) [29]	Primary and secondary school	Australia	SEM
20	Hastings and Bham (2003) [30]	Primary school	South of England	Exploratory factor analysis and regression
21	Lim and Leo (2014) [31]	Middle-school	South Korea	SEM
22	Droogenbroeck, Spruyt, and Vanroelen (2014) [32]		Belgium	CFA and SEM
24	Berghe, Soenens, Aelterman, Cardon, Tallir, and Haerens (2014) [33]	PE tachers	Belguim	MANOVA
25	Brenninkmeijer, Vanyperen and Buunk (2001) [34]	secondary school	Netherlands	ANOVA
26	McCormick and Barnett (2010) [35]	High school	Australia	CFA
27	Pyhältö, Pietarinen, and Salmela-Aro (2011) [36]	primary and secondary school	Finland	Interview

Code	Publication	Educational institution	Country	Data analysis
28	Lackritz (2004) [37]	University faculty members	US	Ccorrelation
29	Flook, Goldberg, Pinger, Bonus, and Davidson (2013) [38]	elementary school	Midwestern city	T-test and Correlations
30	Pietarinen, Pyhältö, Soini and Salmela-Aro (2013) [39]	Primary, subject and special	Finland	SEM and CFA

Table 3. Studies on burnout of teachers teaching English as a Second/ Foreign language

Code	Publication	Educational institution	L1	L2	Country	Data analysis
1	Ghanizadeh and Ghonsooly (2013) [13]	EFL institutes	Persian	English	Iran	SEM
7	Pennington and Ho (1992) [40]	TESOL members	-	-	US	Descriptive statistics
14	Pishghadam and Sahebjam (2012) [41]	institute	Persian	English	Iran	Multiple linear regression
16	Cephe (2010) [42]	English preparatory school of a university	Turkish	English	Turkey	
23	Unaldi, Bardakci, Dolas and Arpaci (2013) [43]	Turkish teachers of English	Turkish	English	Turkey	one-way ANOVA

Table 4. Factors affecting emotional exhaustion of burnout (burnout as a consequence)

Code	Publication	Educational institution	Country	cause
2	Doménech and Gómez (2010) [16]	Primary and secondary school	East Spain	Student misbehavior, demonization, lack of shared decision making, workload and pedagogical barriers
3	Evers, Brouwers and Tomic (2002) [17]	Study-home system	Netherlands	Self-efficacy
8	Skaalvik and Skaalvik (2010) [21]	Elementary and middle school	Norway	Self-efficacy
9	Chang (2009) [8]	K12		Unpleasant emotions from judgments teachers make regarding student behaviors
11	Dorman (2003) [23]	private school	Queensland	Role overload, work pressure, classroom environment and self-esteem
14	Pishghadam and Sahebjam (2012) [41]	institute	Iran	personality types and emotional intelligence (neuroticism and extroversion)
15	Fernet, Guay, Senécal, and Austin (2012) [26]	elementary and high school	Canada	Changes in teachers' perceptions of classroom overload, students' disruptive behavior and autonomous motivation
20	Hastings and Bham (2003) [30]	Primary school	South of England	disrespect

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Code	Publication	Educational institution	Country	cause
22	Droogenbroeck, Spruyt, and Vanroelen (2014) [32]		Belgium	Teaching-related and non-teaching-related workload (autonomy and paperwork)
28	Lackritz (2004) [37]	University faculty members	US	Age (inversely)

Table 5. Factors affecting depersonalization of burnout (burnout as a consequence)

Code	Publication	Educational institution	Country	Cause
2	Doménech and Gómez (2010) [16]	primary and secondary school	East Spain	Lack of shared decision making and workload
3	Evers, Brouwers and Tomic (2002) [17]	Study-home system	Netherlands	Self-efficacy
4	Brouwers and Tomic (2000) [18]	secondary school	Netherlands	Perceived self-efficacy
8	Skaalvik and Skaalvik (2010) [21]	elementary and middle school	Norway	Self-efficacy
11	Dorman (2003) [23]	private school	Queensland	emotional exhaustion, role conflict, self-esteem and school environment
14	Pishghadam and Sahebjam (2012) [41]	institute	Iran	personality types and emotional intelligence (intrapersonal scale of emotional intelligence and agreeableness)
20	Hastings and Bham (2003) [30]	Primary school	South of England	Disrespect and lack of sociability

3.2.4 Factors affecting burnout in general, not mentioned specifically by the author(s) (20 studies, Table 7)

20 articles among selected studies didn't mention the effects of burnout on its specific levels, but burnout causes in general. These factors are as follows:

Teachers' attributions [13], self-efficacy [19], lack of time to prepare lessons, lack of parental interest, low status of the profession, pupil's lack of motivation, pupil's hostility or bad behavior and excessive paperwork [20], work related attitudes [40], personality structure and some contextual variables [22], occupational variables such as: Student disruptive behavior, the difficulties experienced by teachers in managing conflict and the lack of support/consensus [24], number of children, level of teaching, age, and years of teaching experience [25], changes in teachers' perceptions of students' disruptive behaviors and school principal's leadership behaviors and self-efficacy [26], administrative factors [42], individual's unmet expectations and job conditions of low participation in decision making, high levels of role conflict, a lack of freedom and autonomy, absence of social support networks, and, inconsistent reward and punishment structures [27], teachers' misbehavior-related attributions, perceptions regarding work stressors, students 'disobedience and off-task behavior [28], emotion-focused coping such as: lower satisfaction, poor aspirations, lower resilience/buoyancy, and less participation [29], teachers' reflective dialogue with colleagues and organizational politics [31], four interpersonal relationships (students, colleagues, supervisors, and parents) [32] neuroticism [43], quality of motivation in PE teachers [33], stress attributable to student misbehavior [35], teachers' working environment, prolonged unsolved problems in social interactions with pupils, parents and within the professional community [36], numbers of students taught, time invested in various activities and numerical student evaluations [37], teacher's successful co-regulation, i.e. their ability to utilize social resources and inadequacy in teacher-pupil interaction [39]

3.3. Burnout consequences

3.3.1 Consequences of emotional exhaustion (2 studies, Table 8)

Reduced self-efficacy [18, 21]

3.3.2 Consequences of depersonalization (1 study, Table 9)

Reduced Self-efficacy [21]

3.3.3 Consequences of reduced personal accomplishment (1 study, Table 10)

Reduced Self-efficacy [19]

3.3.4 Consequences of burnout in general in studies not mentioned specifically (5 studies, Table 11)

Decline in teacher self-regulation [13], feeling of lack of social support [19], alienation to professional identity', leaving the job or abandoning their teaching position in the institution [42], intention to leave teaching, absenteeism, lessened effort, and lower quality of personal life [27], feeling of inferiority (less superiority) [34] are other consequences of burnout which are really harmful for teachers as well as students.

Self-efficacy is one of the most predictable factors in both affecting and being effected by teachers' burnout, so the relationship is reciprocal.

3.4 Number of Participants and their Mean Age (30 studies, Table12)

The following table displays the number of participants (males and females) in each study and their mean age.

Table 6. Factors affecting reduced personal accomplishment of burnout (burnout as a consequence)

Code	Publication	Educational institution	Country	Cause
2	Doménech and Gómez (2010) [16]	primary and secondary school	East Spain	Student misbehavior and demonization
3	Evers, Brouwers and Tomic (2002) [17]	Study-home system	Netherlands	Self-efficacy
4	Brouwers and Tomic (2000) [18]	secondary school	Netherlands	Perceived self-efficacy
11	Dorman (2003) [23]	private school	Queensland	Teaching efficacy, self-esteem and depersonalization
14	Pishghadam and Sahebjam (2012)[41]	institute	Iran	personality types and emotional intelligence (interpersonal scale and conscientiousness)
20	Hastings and Bham (2003) [30]	Primary school	South of England	Lack of sociability
23	Unaldi, Bardakci, Dolas and Arpaci (2013) [43]	Turkish teachers of English working in a certain district in Turkey	Turkey	extraversion, agreeableness, conscientiousness and openness to experience
29	Flook, Goldberg, Pinger, Bonus, and Davidson (2013) [38]	elementary school	Midwestern city	Lack of received mindfulness intervention

Table 7. Factors affecting burnout in general in studies not mentioned specifically (burnout as a consequence)

Code	Publication	Educational institution	Country	Cause
1	Ghanizadeh and Ghonsooly (2013) [13]	EFL institutes	Iran	Teachers' attributions
5	Brouwers, Evers and Tomic (2001) [19]	secondary school	Netherlands	Self-efficacy
6	Manassero, Buades, Torrens ,Ramis, Vázquez and Ferrer (2006) [20]	nursery and secondary school	Spain	lack of time to prepare lessons, lack of parental interest, low status of the profession, pupil's lack of motivation, pupil's hostility or bad behavior and excessive paperwork
7	Pennington (1992) [40]	TESOL members	US	Work related attitudes
10	Garcia, Munoz and Ortiz (2005) [22]	Special and elementary	Spain	personality structure and some contextual variables
12	López, Santiago, Godás, Castro, Villardefrancos, and Ponte (2008) [24]	Secondary school	Spain	occupational variables such as: Student disruptive behavior, the difficulties experienced by teachers in managing

Code	Publication	Educational institution	Country	Cause
				conflict and the lack of support/consensus
13	Mukundan (2011) [25]	primary, secondary and tertiary school	Malaysia	number of children, level of teaching, age, and years of teaching experience
15	Fernet, Guay, Senécal, and Austin (2012) [26]	elementary and high school	Canada	changes in teachers' perceptions of students' disruptive behaviors and school principal's leadership behaviors and self-efficacy
16	Cephe (2010) [42]	English preparatory school of a university	Turkey	Administrative factors
17	Schwab, Jackson, and Schuler (1986) [27]	elementary and secondary school	New Hampshire	individual's unmet expectations and job conditions of low participation in decision making, high levels of role conflict, a lack of freedom and autonomy, absence of social support networks, and, inconsistent reward and punishment structures
18	Bibou-Nakou, Stogiannidou, and Kiosseoglou (1999) [28]	Elementary school	Northern Greece	teachers' misbehavior-related attributions, perceptions regarding work stressors, students 'disobedience and off-task behavior
19	Parker, Martin, Colmar and Liem (2012) [29]	Primary and secondary school	Australia	emotion-focused coping such as: lower satisfaction, poor aspirations, lower resilience/buoyancy, and less participation
21	Lim and Leo (2014) [31]	Middle-school	South Korea	Teachers' reflective dialogue with colleagues and organizational politics
22	Droogenbroeck, Spruyt, and Vanroelen (2014) [32]		Belgium	Four interpersonal relationships (students, colleagues, supervisors, and parents)
23	Unaldi, Bardakci, Dolas and Arpaci (2013) [43]	Turkish teachers of English working in a certain district	Turkey	Neuroticism

Code	Publication	Educational institution	Country	Cause
		in Turkey		
24	Berghe, Soenens, Aelterman, Cardon, Tallir, and Haerens (2014) [33]	PE	Belguim	quality of motivation in PE teachers
26	McCormick and Barnett (2010) [35]	High school	Australia	stress attributable to student misbehavior
27	Pyhältö, Pietarinen, and Salmela-Aro (2011) [36]	primary and secondary school	Finland	teachers' working environment, prolonged unsolved problems in social interactions with pupils, parents and within the professional community
28	Lackritz (2004) [37]	University faculty members	US	numbers of students taught, time invested in various activities and numerical student evaluations
30	Pietarinen, Pyhältö, Soini and Salmela-Aro (2013) [39]	Primary, subject and special	Finland	teacher's successful co-regulation, i.e. their ability to utilise social resources and inadequacy in teacher-pupil interaction

Table 8. Factors which are affected by emotional exhaustion (burnout as a cause)

Code	Publication	Educational institution	Country	Consequence
4	Brouwers and Tomic (2000) [18]	secondary school	Netherlands	Perceived self-efficacy
8	Skaalvik and Skaalvik (2010) [21]	elementary and middle school	Norway	Self-efficacy

Table 9. Factors which are affected by depersonalization (burnout as a cause)

Code	Publication	Educational institution	Country	Consequence
8	Skaalvik and Skaalvik(2010) [21]	elementary and middle school	Norway	Self-efficacy

Table 10. Factors which are affected by reduced personal accomplishment (burnout as a cause)

Code	Publication	Educational institution	Country	Consequence
4	Brouwers and Tomic (2000) [18]	secondary school	Netherlands	Perceived self-efficacy
8	Skaalvik and Skaalvik (2010) [21]	elementary and middle school	Norway	Self-efficacy

Table 11. Factors which are affected by burnout in general in studies not mentioned specifically (burnout as a cause)

Code	Publication	Educational institution	Country	Consequence
1	Ghanizadeh and Ghonsooly (2013) [13]	EFL institutes	Iran	decline in teacher self-regulation
5	Brouwers, Evers and Tomic (2001) [19]	secondary school	Netherlands	Feeling of lack of social support
16	Cephe (2010) [42]	English preparatory school of a university	Turkey	Alienation to professional identity', results in leaving the job or abandoning their teaching position in the institution
17	Schwab, Jackson, and Schuler (1986) [27]	elementary and secondary school	New Hampshire	intention to leave teaching, absenteeism, lessened effort, and lower quality of personal life
25	Brenninkmeijer, Vanyperen and Buunk (2001) [34]	secondary school	Netherlands	inferiority (less superiority)

Table 12. The number of participants and their mean age

Code	Number	Male	Female	Age	Code	Number	Male	Female	Age
1	204	65	132	33	16	37	6	31	-
2	724	271	453	37	17	339	-	-	-
3	490	376	114	47	18	200	76	124	34
4	243	179	65	46	19	430	143	287	40
5	277	203	74	45	20	100	12	88	35
6	614	228	386	35	21	367	101	266	-
7	90	22	68	43	22	1878	-	-	55
8	2249	720	1529	45	23	224	59	165	-
9	-	-	-	-	24	201	84	117	41
10	99	26	73	42	25	120	72	48	44
11	246	72	174	40	26	416	179	237	42
12	1386	563	823	38	27	68	26	42	44
13	437	0	437	35	28	263	141	122	27
14	147	53	94	-	29	18	2	16	43
15	806	60	646	41	30	2310	439	1871	45

4. CONCLUSION

The above account of research on teacher burnout demonstrates that the consequences of the syndrome are multidimensional in nature and voluminous in quantity (including, decline in teacher self-efficacy and self-regulation, feeling of lack of social support and inferiority, alienation to professional identity, leaving the job or abandoning their teaching position in the institution, absenteeism, effort disengagement, and lower quality of personal life). So, based on the results of this review, it appears that burnout depletion among teachers deserves specific attention. Accordingly, educational policy makers are recommended to present intervention programs making teachers familiarized with the syndrome and helping them mitigate burnout and stress. Such programs can be differentiated based on the orientation and intention of the designed treatment: (a) direct action programs dealing directly with the causes of burnout, and (b) palliatives programs involving indirect treatment of burnout, focusing on techniques for alleviating tension or fatigue.

These intervention programs should take into account the potential causes responsible for burnout origination and development. According to the present review, these sources include attributions, attitudes, job conditions, self-efficacy, personality type, role conflict, and a host of other factors already discussed. Hence, tackling sources of burnout at the individual level will be training teachers to cope with stressful situations; instruction on teachers' beliefs and perceptions, developing and improving teacher's leadership ability, problem solving, and conflict

resolution. At the organizational levels, the strategies might include, reducing degree of polarization in the classroom; reducing number of pupils per class, and changing teacher's work plan or teaching plan. Other equally important measures can be reducing role conflict by clarifying roles, as well as reducing work over load and work pressure through, for instance, shrinking administrative work (paper work). Additionally, treatment of symptoms of stress at the individual level could be workshops on easing stress; support and assistance groups; holidays; in-service training. And for the organizational level, it might include creating a supportive atmosphere in the school; opening channels of communication; involvement in decision making, and developing a positive and open organizational climate. Four skills pertained to low-burnout teaching are also as follows: 1) leadership skills; 2) organizational efficacy skills; 3) self-regulation skills; and 4) skills for evading the burnout trap [44].

As was indicated in the present review, emotional exhaustion is the prime predictor of teacher burnout and is directly linked to negative exchanges with students and teachers' personal experiences and characteristics. Therefore, a specific attention must be paid to emotion regulation strategies targeted at self-regulatory agent exercises which can fix mood when the agent perceives incongruence either internally or externally between real and preferred outcomes. The following emotion regulation strategies in the workplace in order to demote burnout symptoms are recommended [45]:

1. Seek out individuals, who make you feel good;
2. Keep yourself busy working on other things;
3. Do something enjoyable to improve your mood;
4. Try to solve the problem;
5. Find humor in the situation;
6. Think about how the other person feels;
7. Consider how things could be worse;
8. Pretend you Are in a good mood;
9. Turn your attention to something that doesn't bother you, and
10. Remind yourself that you cannot control everything.

The present review attempted to shed light on teacher burnout from different angles. Nevertheless, due to multifaceted and versatile nature of burnout, further reviews are required to capture other aspects not discussed here. It also seems essential to conduct identical studies on teacher burnout in relation to individual differences and in cross-cultural situations. Future studies can also pay focal attention to the methods of measuring burnout and the characteristics of the employed instruments.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Dworkin AG. Teacher burnout in the public schools: Structural causes and consequences for children. Albany: State University of New York Press; 1987.
2. Farber B. Teacher burnout: A psycho-educational perspective. Teachers College Record. 1999;83:235-243.
3. Handy JA. Theoretical and methodological problems within occupational stress and burnout research. Human Relations. 1999;41:351-369.
4. Maslach C. Burnout: The cost of caring. Englewood Cliffs, NJ: Prentice-Hall;1982.
5. Jennett HK, Harris SL, Mesibov GB. Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. Journal of Autism and Developmental Disorders. 2003;33:583-593.
6. Maslach C. Burned-out. Human Behavior.1976;5:16-22.
7. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory manual (3rd edition). Palo Alto, CA: Consulting Psychologist Press; 1996.
8. Chang M. An appraisal perspective of teacher burnout: Examining the emotional work of teachers. Educational Psychology Review. 2009;21(3):193-218.
9. Byrne BM. The nomological network of teacher burnout: A literature review and empirically validated model. In Vandenberghe R, Huberman AM. (Eds.). Understanding and preventing teacher burnout: A sourcebook of International Research and Practice. Cambridge: Cambridge University Press. 1999;85-101.
10. Blasé JJ. A social-psychological grounded theory of teacher stress and burnout. Educational Administration Quarterly.1982;18(4):93-113.
11. Leithwood K, Menzies T, Jantzi D, Leithwood J. School restructuring, transformational leadership and the amelioration of teacher burnout. Anxiety, Stress, and Coping.1996;9:199-215.
12. Vandenberghe R, Huberman AM. (Eds.). Understanding and preventing teacher burnout: A sourcebook of international research and practice. Cambridge: Cambridge University Press;1999.
13. Ghanizadeh A, Ghonsooly B. A tripartite model of EFL teacher attributions, burnout, and self-regulation: Toward the prospects of effective teaching. Educational Research for Policy and Practice. 2014;13(2):145-166.
14. Norris JM, Ortega L. Does type of instruction make a difference? Substantive findings from a meta-analytic review. Language learning. 2001;51(s1):157-213.
15. Creswell J. Research design qualitative and quantitative approaches. London: Sage; 1994.
16. Doménech F, Gómez A. Barriers perceived by teachers at work, coping strategies, self-efficacy and burnout. The Spanish Journal of Psychology. 2010;13(2):637-654.
17. Evers WJG, Brouwers A, Tomic W. Burnout and self-efficacy: A study on teachers beliefs when implementing an innovative educational system in the Netherlands. British Journal of Educational Psychology. 2002;72:227-243.
18. Brouwers A, Tomic W. A longitudinal study of teacher burnout and perceived self-efficacy in classroom management.

Teaching and Teacher Education. 2000;16(2):239-253.

19. Brouwers A, Evers JG, Tomic W. Self-efficacy in eliciting social support and burnout among secondary-school teachers. Journal of Applied Social Psychology. 2001;31(7):1474-1491.

20. Manassero A, Buades E, Torrens G, Ramis C. Teacher burnout: Attributional aspects. Psychology in Spain. 2006;10(1):66-74.

21. Skaalvik E, Skaalvik S. Teacher self-efficacy and teacher burnout: A study of relations. Teaching and Teacher Education. 2010;26(4):1059-1069.

22. Garcia F, Munoz E, Ortiz M. Personality and contextual variables in teacher burnout. Personality and Individual Differrences. 2005;38(4):929-940.

23. Dorman J. Testing a model for teacher burnout. Australian Journal of Educational & Developmental Psychology. 2003;3:35-47.

24. López JO, Santiago Mj, Godás A, Castro C, Villardefrancos E, Ponte D. An integrative approach to burnout in secondary school teachers: Examining the role of student disruptive behaviour and disciplinary issues. International Journal of Psychology and Psychological Therapy. 2008;8(2):259-270.

25. Mukundan J, Ahour T. Burnout among female teachers in Malaysia. Journal of International Education Research. 2011;7(3):25-38.

26. Fernet C, Guay F, Senécal C, Austin S. Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. Teaching and Teacher Education. 2012;28(4):514-525.

27. Schwab RL, Jackson SE, Schuler RA. Educator burnout: Sources and consequences. Educational Research Journal. 1986;20(3):14- 30.

28. Bibou-NakouI S, togiannidou A, Kiosseoglou G. The relation between teacher burnout and teachers' attributions and practices regarding school behavior problems. School Psychology International. 2012;20(2):208-217.

29. Parker PD, Martin AJ, Colmar S, Liem GA. Teachers' workplace well-being: Exploring a process model of goal orientation, coping behavior, engagement, and burnout. Teaching and Teacher Education. 2012;28:503-513.

30. Hastings RP, Bham MS. The relationship between student behaviour patterns and teacher burnout. School Psychology International. 2003;24(3):115-127.

31. Lim S, Leo S. The mediating roles of collective teacher efficacy in the relations of teachers perceptions of school organizational climate to their burnout. Teaching and Teacher Education. 2014;44:138-147.

32. Droogenbroeck FV, Spruyt B, Vanroelen C. Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. Teaching and Teacher Education. 2014;43:99-109.

33. Berghe LV, Soenens B, Aelterman N, Cardon G, Tallir IB, Haerens L. Within-person profiles of teachers motivation to teach: Associations with need satisfaction at work, need-supportive teaching, and burnout. Psychology of Sport and Exercise. 2014;15:407-417.

34. Brenninkmeijer V, Vanyperen NW, Buunk BP. I am not a better teacher, but others are doing worse: Burnout and perceptions of superiority among teachers. Social Psychology of Education. 2001;4:259-274.

35. McCormick J. Teachers attributions for stress and their relationships with burnout. International Journal of Educational Management. 2011;25(3):278-293.

36. Pyhältö K, Pietarinen J, Salmela-Aro K. Teacher working-environment fit as a framework for burnout experienced by Finnish teachers. Teaching and Teacher Education. 2011;27:1101-1110.

37. Lackritz JR. Exploring burnout among university faculty: Incidence, performance, and demographic issues. Teaching and Teacher Education. 2004;20:713-729.

38. Flook L, Goldberg SB, Pinger L, Bonus K, Davidson RJ. Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. Mind, Brain, and Education. 2013;7(3):182-195.

39. Pietarinen J, Pyhältö K, Soini T, Salmela-Aro K. Reducing teacher burnout: A socio-contextual approach. Teaching and Teacher Education. 2013;35:62-72.

40. Penington M, Ho B. A comparison of work-related attitudes of TESOL members with other educators and employee groups: An international survey using The Maslach Burnout Inventory. The paper presented at the TESOL annual conference held in Vancouver, British Columbia; 1992.

41. Pishghadam R, Sahebjam S. Personality and emotional intelligencein teacher burnout. The Spanish Journal of Psychology. 2012;15(1):227-236.

42. Cephe PT. A study of the factors leading english teachers to burnout. H. U. Journal of Education. 2010;38:25-34.

43. Unaldi I, Bardakci M, Dolas F, Arpaci D. The relationship between occupational burnout and personality traits of Turkish EFL teachers. Journal of Education and Practice. 2013;4(13):86-98.

44. Friedman IA. Teacher burnout: the concept and its measurement. Jerusalem: The Henrietta Szold Institute; 1999.

45. Diefendorff JM, Richard EM, Yang J. Emotion regulation at work: Linking strategies to affective events and discrete negative emotions. Journal of Vocational Behavior. 2008;73:498-508.