



Examining Empirical Studies on Teacher Burnout: A Systematic Review

Öğretmen Tükenmişliğine Yönelik Ampirik Araştırmaların İncelenmesi: Bir Sistemantik Derleme Çalışması

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ABSTRACT: The purpose of this study was to examine the empirical studies on teacher burnout between 2000-2017. This study was designed as a systematic review examining 33 studies included in EBSCO, ERIC, SCOPUS and ULAKBİM databases and conducted in the Turkish context. The results revealed that a set of organizational and individual variables were associated with teacher burnout. The individual variables related to teacher burnout were self-efficacy beliefs, positive feelings and views, excessive control or suppression of feelings and views, a personality type prone to emotional imbalance, high level of external locus of control, having unrealistic expectations about education and school, monitoring teacher behaviours, and age. Organizational variables were job satisfaction, perceived administrative support, an environment of cooperation, support and trust, deviant student behaviours, and school climate. In this regard, the results of the study showed that teacher burnout was a construct associated with a set of both individual and organizational variables.

Keywords: Burnout, empirical study, systematical review

ÖZ: Bu araştırmanın amacı, 2000-2017 yılları arasında öğretmen tükenmişliğine yönelik ampirik araştırmaların incelenmesidir. Sistemantik derleme olarak desenlenen bu araştırmada EBSCO, ERIC, SCOPUS, ULAKBİM veri tabanlarında yer alan ve Türkiye örneklemeyle sınırlandırılan 33 makale değerlendirilmeye alınmıştır. Sonuçlar bireysel ve örgütsel değişkenlerin öğretmenlerin tükenmişlikleri ile ilişkili olduğunu göstermektedir. Tükenmişlikle ilişkili bireysel değişkenler; mesleki yetkinlik inancı, pozitif duygu ve düşünceler, duygu ve düşünceleri aşırı kontrol etme ya da bastırma çabası, duygusal dengesizliğe açık kişilik yapısı, yüksek dış denetim odağı, eğitim ve okulla ilgili gerçekçi olmayan yüksek beklentilere sahip olma, gözetimci öğretmen davranışları ve yaştır. Örgütsel değişkenler ise mesleki doyum, algılanan yönetici desteği, işbirliği ortamı, destek ve güven ortamı, istenmeyen öğrenci davranışları ve okul iklimidir. Bu bağlamda sonuçlar öğretmen tükenmişliğinin mesleki, psiko-sosyal, bireysel ve örgütsel bir dizi değişkenle ilişkili bir kavram olduğunu göstermektedir.

Anahtar Sözcükler: Tükenmişlik, ampirik araştırma, sistemantik derleme

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1. INTRODUCTION

Job burnout has been a prominent concept that was at the centre of the psychology literature and cultural discussions nearly 50 years ago (Schaufeli, Leiter & Maslach, 2009). The burnout phenomenon emerged with the disorders among employees in the field of human resources in the United States in 1970s (Maslach, Schaufeli & Leiter, 2001). The early research on burnout focused on emotional exhaustion and coping with tiredness (Maslach & Jackson, 1981). Freudenberger (1974), the first scholar who addressed burnout, examined the burnout levels of the staff voluntarily working in clinics, and associated the causes of burnout with reduced motivation and job commitment. Then, Maslach (1978) touched upon the emotional stress experienced by the staff working in human resources units. The employees were surrounded with customers' psychological, social and physical problems and feelings of anger, fear and hopelessness. The professionals' being under constant emotional stress due to working under these circumstances led to job burnout (Maslach & Jackson, 1981). The emergence of positive psychology and the research on employees' positive organisational behaviours brought about scholarly works on job burnout.

Job burnout is a psychological syndrome that appears as a reaction to job-related interpersonal stress sources that reduce employees' effectiveness (Maslach & Jackson, 1981). These reactions include emotional exhaustion, the feeling of indifference, separation from work and the feeling of ineffectiveness. Emotional exhaustion refers to the depletion of emotional and physical sources, and corresponds to individuals' emotional burnout or having a sense of exhaustion, and running out of energy. The feeling of indifference or desensitisation is observed as individuals' weakening of their relationships with others, loneliness in interpersonal relationships, and an increase in cynical and rude behaviours towards others as a result of emotional exhaustion. Low achievement or the feeling of ineffectiveness is explained by factors such as being dispirited, being unable to cope with stress and inefficiency or failure (Collings & Murray, 1996; Cordes & Dougherty, 1993; Lee & Asforth, 1996; Maslach & Jackson, 1981; Maslach, Schaufeli & Leiter, 2001). In this regard, burnout is a process that requires guidance and support for individuals (Brouwers & Tomic, 2000). According to Shirom and Ezrachi (2003), burnout is conceptualised as a three-dimensional syndrome. Moreover, some researchers assert that the dimension of emotional exhaustion forms the basis for burnout.

Most of the studies on burnout in organisational environments were designed as relational/correlational research. Researchers reported that environmental/organisational, individual and demographic factors were influential on burnout (Brewer & Clippard, 2002; Cordes & Dougherty, 1993). The organisational factors that trigger burnout include employees' intent to quit their job, their satisfaction and job exhaustion, workload, role conflicts, role ambiguity, the working environment itself and the locus of control (Burke & Greenglass, 1995; Cordes & Dougherty, 1993; Brewer & Shapard, 2004; Freudenberger, 1974). On the other hand, physical exhaustion, sleeplessness and family problems as well as over-sensitive, anxious and empathetic personality types can be listed as individual factors (Burke & Greenglass, 1995; Maslach & Jackson, 1981). Additionally, variables including marital status (Cordes & Dougherty, 1993), gender and age (Jackson, 1993) are among the demographic characteristics that affect burnout.

Job burnout arose among employees of human resources due to long-term professional stress. However different the causes may be, it was reported that long-term professional stress can also lead to burnout in teachers (Jennett, Harris & Mesibov, 2003). Stress factors affecting teachers can be students with misbehaviour problems, the problems experiences in parent-teacher relationships and conflicts between colleagues. Strategies such as teachers' active problem solving skills, social and emotional support between colleagues, re-organising instructional strategies and the learning environment and cooperating with parents constitute the

methods for coping with stress (Grayson & Alvarez, 2008; Skaalvik & Skaalvik, 2007). Teachers' motivation and job satisfaction are among the antecedents of their burnout (Skaalvik & Skaalvik, 2007). The burnout that teachers experience due to depression and stress during their professional life can also cause significant health problems and early retirement (Vandenberghe & Huberman, 1999). Furthermore, the pressure of achieving measurable goals exposed to teachers by school administrators, not having confidence in their professional competence, and the physical environment that affect them trigger teacher burnout (Friedman, 1991).

Many studies can be found in the Turkish context with regard to teacher burnout. In these studies, teacher burnout was examined in relation to teacher self-efficacy (Cansoy, Parlar & Kılınç, 2017; Sarıcam & Sakiz, 2014), administrators' leadership styles (Bakan, Erşahan, Büyükbeşe, Doğan & Kefe, 2015), emotional labour (Akın, Aydın, Erdoğan & Demirkasımoğlu, 2014), job-life satisfaction (Avşaroğlu, Deniz & Kahraman, 2005), depression, job satisfaction, mobbing (Aydoğan, Doğan & Bayram, 2009; Çınar, 2015; Ertürk & Keçecioglu, 2012; Gençay, 2007; Okçu & Çetin, 2017), ideologies of student control (Bas, 2011), subjective well-being and school life quality (Cenkseven Önder & Sarı, 2009), principals' service-oriented leadership behaviours (Cerit, 2008), organisational trust (Çağlar, 2011), organisational commitment (Çetin, Basım & Aydoğan, 2011), professional competence (Çiftçi, 2015), psychological endurance and self-monitoring (Erkutlu, 2012), collective efficacy and self-regulation (Gürçay, Yılmaz & Ekici, 2009), organisational citizenship (İnandı & Büyüközkan, 2013), students' in-class misbehaviour (Karakaya, Brusseau & Karademir, 2015), emotional intelligence and stress (Karakuş, 2013), psychological violence, stress and life satisfaction (Karakuş & Çankaya, 2012), job satisfaction and locus of control (Sarı, 2005; Savaş, Bozgeyik & Eser, 2014; Sünbül, 2003), organisational citizenship behaviours (Sezgin & Kılınç, 2012), being a learner organisation (Çam-Tosun & Altunay, 2017) and professional commitment (Tümkeya & Uştu, 2016).

In the literature, there are systematic reviews and meta-analysis studies on the concept of burnout (Fothergill, Edwards & Burnard, 2004; Goodger, Gorely, Lavalley & Harwood, 2007; Lee & Ashforth, 1996; Watts & Robertson, 2011). Such systematic reviews aimed at unifying the studies on burnout, and demonstrating the sources and consequences of burnout. However, no studies that attempted to systematically review and evaluate the research on teacher burnout have been encountered in the Turkish context. Considering that the concept of burnout was focused in many empirical works in Turkey, the present study that aims to systematically review the studies related to teacher burnout is expected to fill this gap in the literature. Moreover, the findings of this study can guide further studies in terms of demonstrating the factors that cause to teacher burnout and its consequences. The findings can also be an important source of data for policy-makers to prevent teacher burnout. In this respect, the primary aim of this study is to reveal the determinants of teacher burnout and the factors related to burnout. Accordingly, the following research question is addressed:

- i. Which variables relate to the teacher burnout?

2.METHOD

This study was designed as a systematic review, a method that aims to summarise, analyse and synthesise current knowledge in a field by selecting studies that meet pre-set criteria (Eriksson & Lindstrom 2005). Systematic reviews focus on synthesising the findings of many different studies in a way that is clear, transparent, replicable and accountable (Oakley, 2002). In health sciences, systematic review is commonly used as a methodology, and there have been discussions about its use in educational sciences. Some educational researchers claim that systematic reviews are crucial as they make research findings more accessible and enable to

examine the perspectives of different shareholders (Clegg, 2005; Hammersley, 2008). According to Minner, Levuy and Century (2010), systematic review is used in order to guide future studies and practices by demonstrating significant points or relationships in the educational literature on a research topic.

2.1. Procedure

Inclusion Criteria. The studies that were included in this review were selected based on criteria such as (i) being correlational studies that investigate teacher burnout, (ii) being published in national and international refereed-journals between 2000-2017, (iii) focusing on teachers in the Turkish context, (iv) reporting findings related to the research questions provided above, (v) being conducted in formal educational institutions and (vi) employing the quantitative research method and the relational survey model. Theses/dissertations and reports were not included.

Scanning. In the scanning process, a total of 204 studies in the Turkish context were retrieved by searching the key word “*teacher burnout*” in the databases including EBSCO, ERIC, SCOPUS and ULAKBİM. Then, 145 studies that were not related to job burnout were excluded from the evaluation, and 26 studies recurring in the databases were excluded from the remaining 59 studies. As a result, a total of 33 studies were included in the review.

Data Gathering and Analysis. An evaluation form was developed in accordance with the criteria for the inclusion of studies. The studies were searched by the researchers by using this form. The full-text studies were coded as S1, S2, S3,...S33, and stored in the computer environment. The authors, topics, related concepts, samples, instruments and findings of the studies were then divided into categories by using Microsoft Office Excel.

Determining the Quality of the Studies. The quality of the 33 studies included were evaluated based on EPPI-Centre (2018), and the framework for assessing the weight of evidence proposed by Gough, Oliver and Thomas (2017). Evaluating the methodological quality, methodological relevance and topic relevance of studies as a whole demonstrates the weight of evidence. Thus, the design of the studies can make them stronger in terms of evidence. Besides, the methodology and the topic of the articles being relevant also contribute to this aspect. All three researchers of the present study prepared a quality check-list and evaluated the studies by rating them from 1 to 4 based on quality. In the process of synthesising the findings, the studies were summarised and coded in accordance with the research questions. Common codes were then combined to form the themes.

3.FINDINGS

In this section, the studies examined by the researchers were evaluated with respect to their similar and different aspects and based on the research questions. Table 1 presents the objectives, methods, participants, measurement tools and results of the studies examined.

Table 1. Aims, methods, participants, relational variables, scales and findings of the studies examined

Study	Aim	Method-Participants	Relationally examined variable (sub-dimensions)	Measurement tools employed	Findings
Sünbül (2003)	Relationships between teachers' locus of control, burnout and job satisfaction	High school teachers (<i>n</i> = 297)	Job satisfaction, locus of control	Maslach Burnout Scale	According to the results of the regression analysis, job satisfaction and locus of control are positive and significant predictors of emotional burnout. Locus of control positively and significantly predicts desensitisation, and job satisfaction negatively and significantly predicts desensitisation.
Avşaroğlu, Deniz & Kahraman (2005)	Relationships between life satisfaction, job satisfaction and professional burnout	Vocational high school teachers (<i>n</i> = 173)	Job satisfaction, life satisfaction	Maslach Burnout Scale	Life satisfaction, emotional burnout and personal failure are negatively related. Emotional burnout and job satisfaction are negatively related.
Sari (2005)	Relationships between burnout, job satisfaction and locus of control	Elementary school teachers and 33 principals (<i>n</i> = 262)	Job satisfaction and locus of control	Maslach Burnout Scale	Emotional burnout, desensitisation and locus of control are positively related. Emotional burnout and desensitisation are negatively related to job satisfaction. Age is positively related to personal success and desensitisation.
Gençay (2007)	The relationship between job satisfaction and professional burnout	Physical education and sports (<i>n</i> = 93)	Job satisfaction (working hours, duration of service, monthly income)	Maslach Burnout Scale	Emotional burnout and teachers' job satisfaction are negatively related.
Deryakulu (2007)	Computer teachers' burnout	Computer teachers (<i>n</i> = 122)	Teachers' course load, average number of computer problems they encounter, school level	Maslach Burnout Scale	The problems encountered during computer instruction positively and significantly predict emotional burnout. Course load positively and significantly predicts emotional burnout.
Cerit (2008)	The effect of primary school teachers' servant leadership behaviours on teacher burnout	Primary school teachers (<i>n</i> = 487)	Servant leadership (affection, empowerment, vision, humility, reliability)	Maslach Burnout Scale	Servant leadership behaviours negatively predict teacher burnout. School principals' behaviours of affection negatively predict emotional burnout, desensitisation and personal failure. Reliability negatively predict emotional burnout, desensitisation and personal failure.
Cenkseven, Önder & Sarı (2009)	Relationships between teachers' subjective well-being, burnout and school life quality	Primary school teachers (<i>n</i> = 161)	Relationships between teachers' subjective well-being, burnout and school life quality	Teacher burnout scale	Subjective well-being is negatively related to coping with stress (burnout). Coping with stress (burnout) is positively related to negative feelings.
Gürçay, Yılmaz & Ekici (2009)	Relationships between collective efficacy, self-regulation and burnout	Elementary and middle school teachers (<i>n</i> = 122)	Collective efficacy, self-regulation	Maslach Burnout Scale	Emotional burnout and collective efficacy are negatively related. Emotional burnout is negatively related to self-regulation and positively related to desensitisation.

Aydoğan, Doğan & Bayram (2009)	Relationships between burnout, depression and job satisfaction	High school teachers ($n = 255$)	Depression, job satisfaction	Burnout scale (physical, emotional and cognitive)	Depression and burnout are positively related. Depression predicts burnout.
Study	Aim	Method-Participants	Relationally examined variable (sub-dimensions)	Measurement tools employed	Findings
Çağlar (2011)	The relationship between organisational trust and teachers' professional burnout	Primary school teachers ($n = 325$)	Organisational trust (Trust in colleagues, principal, students and parents)	Maslach Burnout Scale	Organisational trust and burnout are inversely related. The sub-dimensions of organisational trust are negatively related to emotional burnout and desensitisation.
Çetin, Basım & Aydoğan (2011)	The relationship between organisational commitment and burnout	Primary school teachers ($n = 349$)	Affective commitment, continuance commitment, normative commitment	Maslach Burnout Scale	Affective commitment negatively predicts emotional burnout. Desensitisation negatively predicts affective commitment. Affective commitment negatively predicts personal failure.
Telef (2011)	Examining the relationship between teacher self-efficacy job satisfaction and burnout	Elementary school teachers ($n = 349$)	Teacher self-efficacy, job satisfaction	Maslach Burnout Scale	Teacher self-efficacy and burnout are negatively related.
Bas (2011)	The relationship between the ideologies of student control and teacher burnout	Elementary school teachers ($n = 376$)	Scale of Student Control Ideologies	Maslach Burnout Scale	According to the results of the regression analysis, the ideologies of student control explain 17% of the variation in teacher burnout. The more the ideology of supervisory student control emerges, the more burnout is observed.
Ertürk & Keçecioğlu (2012)	The relationship between job satisfaction and professional burnout	Primary and high school teachers ($n = 224$)	Job satisfaction scale (current job, salary, administration, friends and job in general)	Maslach Burnout Scale	Job satisfaction is negatively related to emotional burnout, desensitisation and personal failure. Emotional burnout has the highest level of relationship with job satisfaction.
Karakuş & Çankaya (2012)	Relationships between psychological violence against teachers, stress, job satisfaction and life satisfaction	Elementary and middle school teachers ($n = 237$)	Life satisfaction, job satisfaction, stress	Maslach Burnout Scale	Life satisfaction and job satisfaction are negatively related to burnout. Psychological violence and burnout are positively and significantly related. Stress and burnout are positively and significantly related. Psychological violence and stress predict burnout.
Sezgin & Kılınç (2012)	The relationship between teachers' professional burnout levels and organisational citizenship behaviours	Elementary school teachers ($n = 269$)	Organisational citizenship (conscientiousness, helpfulness, virtuousness, sportsmanship)	Maslach Burnout Scale	Helpfulness negatively predicts emotional burnout. Helpfulness positively predicts personal success. Sportsmanship positively predicts personal success.

Erkutlu (2012)	Examining the relationships between teacher burnout, and psychological endurance, self-monitoring and organisational policies.	High school teachers (n = 112)	Organisational policy perceptions, psychological endurance, self-monitoring	Maslach Burnout Scale	Organisational policy perceptions positively predict teacher burnout. Psychological endurance negatively predicts teacher burnout. Self-monitoring positively predicts teacher burnout
Mereş, Pişkin, Boysan & Şehribanoğlu (2013)	The effect of school climate, job satisfaction and sleeping quality on burnout	Elementary school teachers (n = 184)	Job satisfaction, sleeping quality	Maslach Burnout Scale	School climate negatively predicts emotional burnout, and positively and significantly predicts the feeling of personal success. Intrinsic job satisfaction negatively predicts emotional burnout and desensitisation, and positively predicts personal success.
Study	Aim	Method-Participants	Relationally examined variable (sub-dimensions)	Measurement tools employed	Findings
Karakuş (2013)	Relationships between emotional intelligence, burnout and stress	Elementary school teachers (n = 425)	Relationships between emotional intelligence, burnout and stress	Maslach Burnout Scale	Age and burnout are negatively related. Depression, stress and anxiety are negatively related to burnout.
Akın, Aydın, Erdoğan & Demirkasımoğlu (2014).	Examining the relationship between emotional labour and teacher burnout	Elementary school teachers (n = 370)	Emotional labour (Deep role-playing, surface role-playing, natural feelings)	Maslach Burnout Scale	According to the results of the regression analysis, emotional burnout has a negative relationship with deep role-playing, and a positive relationship with surface role-playing. Deep role-playing and surface role-playing are negative predictors of desensitisation. Deep role-playing and natural feelings are negative predictors of personal failure.
Savaş, Bozgeyik & Eser (2014)	Examining the relationship between teacher self-efficacy and burnout	Elementary and middle school teachers (n = 163)	Teacher self-efficacy (student participation, instructional strategies, classroom management)	Maslach Burnout Scale	According to the results of the regression analysis, teacher self-efficacy is negatively related to teacher burnout, and a predictor of burnout.
Sarıçam & Sakız (2014).	The relationship between teacher self-efficacy and burnout	Special education teacher (n = 118)	Teacher self-efficacy (student participation, instructional strategies, classroom management)	Maslach Burnout Scale	According to the results of the regression analysis, teacher self-efficacy is a negative predictor of emotional burnout and desensitisation, but a positive and significant predictor of personal success.
Çınar (2015)	The relationship between burnout and job satisfaction	Religious culture teachers (n = 161)	Job satisfaction (intrinsic job satisfaction, extrinsic job satisfaction)	Maslach Burnout Scale	Job satisfaction is negatively related to emotional burnout and desensitisation, but positively related to personal success. Intrinsic job satisfaction has a higher level of relationship with emotional burnout, desensitisation and personal success, compared to extrinsic job satisfaction.

Çiftçi (2015)	The relationship between teachers' professional competence perceptions and burnout	Preschool and special education teachers (n = 318)	Teacher efficacy scale	Teacher professional burnout scale	Teachers' professional competence perceptions are negatively and significantly related to professional burnout.
Bakan, Erşahan, Büyükbese, Doğan & Kefe (2015)	The relationship between administrators' leadership styles and teacher burnout	Primary and high school teachers (n = 269)	Multi-factor leadership (inspirational motivation, intellectual stimulation, individual interest, conditional rewarding and administration with expectation)	Friedman unidimensional burnout scale	Teachers' burnout levels are negatively and significantly related to inspirational motivation, intellectual stimulation, individual interest, conditional rewarding and administration with expectation. The highest level of relationship is with conditional rewarding, a sub-dimension of interactional leadership.
İnanđı & Büyüközkan (2015)	The relationship between organisational citizenship and burnout	Elementary school teachers (n = 1699)	Organizational citizenship, altruism, conscientiousness, sportsmanship, courtesy, civil virtue.	Maslach Burnout Scale	Conscientiousness, sportsmanship and civil virtue negatively predict emotional burnout. Conscientiousness negatively predict desensitisation. Altruism, conscientiousness, sportsmanship, courtesy and civil virtue positively predict personal success.
Study	Aim	Method-Participants	Relationally examined variable (sub-dimensions)	Measurement tools employed	Findings
Karakaya, Brusseau & Karademir (2015)	The relationship between student s' misbehaviours and teacher burnout	Sports high school teacher candidates (n = 226)	Teacher candidates misbehaviour questionnaire	Maslach Burnout Scale	Teacher candidates misbehaviour is negatively and significantly related to emotional burnout, desensitisation and personal success. Student misbehaviour is a predictor variable, and predicts emotional burnout, desensitisation and personal success.
Gündüz (2016)	The relationship between teachers' burnout and unreasonable beliefs	Elementary, middle and high school teachers (n = 633)	Unreasonable teacher beliefs	Maslach Burnout Scale	Unreasonable teacher behaviours positively explain teachers' emotional burnout. Unreasonable teacher behaviours towards students positively explain desensitisation.
Çoban, Karakaya & Karademir, (2016)	The relationship between mentally-handicapped students' negative behaviours in physical education and sports classes and teachers' burnout levels.	Physical education teachers (n = 195)	Students' misbehaviours	Maslach Burnout Scale	Students' misbehaviours are positive and significant predictors of teachers' emotional burnout, desensitisation and personal failure.
Tümkiye & Uştu (2016)	The relationship between burnout and professional commitment	Elementary school teachers (n = 275)	Professional commitment	Maslach Burnout Scale	Teachers' professional commitment and burnout are negatively related. In addition, emotional burnout is negatively related to desensitisation and positively related to personal success.

Cansoy, Parlar & Kılınç (2017)	The relationship between teacher self-efficacy and teacher burnout	Elementary, middle and high school teachers (<i>n</i> = 416)	Teacher self-efficacy Student participation, instructional strategies, classroom management	Maslach Burnout Scale	According to the results of the regression analysis, self-efficacy towards student participation is the only predictor of emotional burnout, desensitisation and individual success.
Çam-Tosun & Altunay (2017)	The relationship between being a learner organisation and teacher professional burnout	Elementary school teachers (<i>n</i> = 84)	Being a learner organisation (learning as a team, mental models, shared vision and individual dominance)	Maslach Burnout Scale	The level of being a learner organisation and burnout are negatively related.
Okçu & Çetin (2017)	Examining the relationships between mobbing, job satisfaction and burnout	Elementary and middle school teachers (<i>n</i> = 830)	Mobbing towards relationships, mobbing towards tasks, job satisfaction	Maslach Burnout Scale	Mobbing towards tasks positively predict burnout. Job satisfaction negatively predicts burnout.

3.1. Organizational and Individual Factors Related to Burnout

The way feelings are expressed: Akın, Aydın, Erdoğan and Demirkasımoğlu (2014) found that teachers' showing their feelings in the form of superficial behaviours in their relationships with students increased emotional burnout and desensitisation. Similarly, Erkutlu (2012) demonstrated that teachers' burnout levels went up when they focused on emotional control behaviours to suppress their feelings. Unlike these findings, Akın, Aydın, Erdoğan and Demirkasımoğlu (2014) revealed that teachers' levels of emotional burnout and desensitisation decreased and their feeling of personal success increased when they showed that feelings to their students in a sincere and open way. Likewise, Akın, Aydın, Erdoğan and Demirkasımoğlu (2014) reported that teachers' personal success increased with deep and natural behaviours. Supporting these findings, Karakuş (2013) concluded that teachers' emotional intelligence related to recognising or controlling their feelings was negatively related to their burnout. In this context, it can be stated that the burnout level of teachers who expressed their feelings in a sincere way was found to be lower.

Individuals' beliefs in their competence: Savaş, Bozgeyik and Eser (2014) found that teachers' burnout levels decreased as their self-efficacy increased. In a similar vein, Sarıçam and Sakız (2014) suggested that teacher self-efficacy significantly predicted all dimensions of burnout. In another study, Telef (2011) claimed that teacher self-efficacy and burnout were negatively related. As is consistent with these findings, Cansoy, Parlar and Kılınç (2017) revealed that teachers' self-efficacy perceptions towards student participation negatively predicted emotional burnout and desensitisation, while positively predicting the feeling of personal success. With respect to the perception of professional competence, Çiftçi (2015) reported that teachers' professional burnout, which refers to alienation from students and colleagues, decreased with improved beliefs in their professional competence. Indirectly supporting these findings, Tümkaya and Uştu (2016) observed that teachers' commitment in their profession was negatively related to their burnout. So, it can be interpreted that the more teachers believe that they can perform their duties effectively, the less their burnout level will be.

Locus of control: Sünbül (2003) found that teachers with external locus of control experienced higher levels of emotional burnout and desensitisation. Similarly, Sari (2005) demonstrated that teachers' locus of control had a negative relationship with their levels of emotional burnout and desensitisation. Accordingly, this shows that external control pressure on teachers' duties will increase their burnout.

Individuals' feelings and thoughts about themselves: Erkutlu (2012) showed that teacher burnout decreased as psychological endurance, which refers to the capacity to cope with problems and difficulties in life, increased. Cenkseven Önder and Sarı (2009) asserted that individuals' coping with stress was negatively related to their subjective well-being, and positively related to their negative affect, a dimension of subjective well-being. In parallel with these findings, Karakuş and Çankaya (2012) found that life satisfaction was negatively related to burnout. Likewise, Avşaroğlu, Deniz and Kahraman (2005) indicated that life satisfaction was negatively related to emotional burnout and personal success. Gürçay, Yılmaz and Ekici (2009) revealed that self-regulation, which is seen as a characteristic related to one's own learning, was negatively related to emotional burnout, but positively related to personal success. Within this context, it can be advocated that teachers' positive feelings about themselves and their lives will decrease teacher burnout.

Age: Sari (2005), Sünbül (2003) and Deryakulu (2007) demonstrated that age was positively related to, and a significant predictor of, personal success. Sari (2005) and Sünbül (2003) observed that age positively predicted desensitisation, while Karakuş (2013) determined that age was negatively related to burnout for both female and male participants, and it was a significant predictor of burnout for men, but not for women. Contrary to these findings, age was

also reported not to be related to burnout or its sub-dimensions (Aydoğan, Doğan & Bayram, 2009; Erkutlu, 2012; Gençay, 2007; Savaş, Bozgeyik & Eser, 2014). There may be a positive relationship between age and personal success, but the findings regarding the relationship between age and burnout are contradictory. Yet, age may be positively related to and predict personal success.

High Expectation: Gündüz (2016) reported that unreasonable teacher behaviours predicted emotional burnout and desensitisation. He also found that teachers' perfectionism in their expectations from students, parents and school, exaggeration of problems and unachievable expectations increased emotional burnout and desensitisation. In this context, it can be stated that teacher burnout might increase due to inadequate school and student performance.

Depression: Karakuş (2013) observed negative relationships between depression, stress and anxiety levels and burnout. Consistently, Aydoğan, Doğan and Bayram (2009) demonstrated that teachers' depression levels were positively related to burnout, and burnout increased with depression. Accordingly, it can be interpreted that the increase in teachers' depressive tendencies might lead to burnout.

Classroom-related factors: In a study conducted in special education and rehabilitation institutions, Çoban, Karakaya and Karademir (2016) found that students' misbehaviours that violate classroom rules and disrupt the flow of lessons caused different symptoms of burnout in teachers. Similarly, Karakaya, Brusseau and Karademir (2015) showed that student misbehaviours in the classroom were predictors of emotional burnout, desensitisation and personal success. These behaviours mainly included speaking without permission, disturbing others, disrupting tasks, polluting the environment, being busy with unrelated things and complaining about others. Besides, in a study with computer teachers, Deryakulu (2007) reported that the technical problems encountered in computer instruction increased emotional burnout. In another study, it was found that teachers' levels of desensitisation increased with their supervisory control behaviours (Bas, 2011). Accordingly, it can be said that problems occurred due to classroom management might increase teacher burnout.

Job satisfaction: Sünbül (2003) determined that job satisfaction reduced emotional burnout and desensitisation. Similar findings were also reported by Avşaroğlu, Deniz and Kahraman (2005), Ertürk and Keçecioglu (2012), Çınar (2015) and Sari (2005). In some studies, job satisfaction was addressed in the form of intrinsic and extrinsic job satisfaction. Mery, Pişkin, Boysan and Şehribanoğlu (2013) indicated that teachers' intrinsic job satisfaction was more influential on burnout compared to extrinsic job satisfaction, and intrinsic job satisfaction reduced emotional burnout and desensitisation, while increasing the feeling of personal success. Likewise, Çınar (2015) revealed that burnout and intrinsic job satisfaction were related at a higher level compared to extrinsic job satisfaction, and intrinsic job satisfaction was negatively related to burnout. Furthermore, studies that addressed burnout as a single variable reported supportive findings that job satisfaction was negatively related to burnout. Zira Okçu and Çetin (2017), Gençay (2007) and Karakuş and Çankaya (2012) found that the increase in teachers' job satisfaction was a significant variable for reducing burnout. In this context, teachers' increasing expectations about their duties may decrease teacher burnout.

Workload: The work load in school was reported to increase emotional burnout and desensitisation (Deryakulu, 2007). Accordingly, teachers' expectations about their duties may increase teacher burnout.

Administrative support: Cerit (2008) demonstrated that school principals' servant leadership behaviours reduced teacher burnout, and school principals' behaviours of affection and trust reduced emotional burnout and desensitisation, and increased personal success.

Similarly, Bakan, Erşahan, Büyükbese, Doğan and Kefe (2015) revealed a negative relationship between administrators' behaviours of inspirational motivation, intellectual stimulation, individual interest, administration with expectation and conditional rewarding, and teachers' burnout levels. They also found that the highest level of relationship was between conditional rewarding, which refers to being rewarded as a result of an achievement, and burnout. On the other hand, Çağlar (2011) observed that teachers' trust in administrators were negatively related to emotional burnout and desensitisation. In this context, supportive and cooperative leadership behaviors of school principals may reduce teacher burnout.

Environment of cooperation, support and trust: Merey, Pişkin, Boysan and Şehribanoğlu (2013) determined that a positive school climate negatively predicted emotional burnout and positively and significantly predicted the feeling of personal success. Sezgin and Kılınç (2012) reported that the behaviours of helpfulness, which refers to colleagues' helping each other and helping other individuals, reduced emotional burnout, and arose teachers' feeling of personal success. They also found that the behaviours of sportsmanship arose the feeling of personal success. Consistently, İnandı and Büyüközkan (2013) showed that the behaviours of conscientiousness, sportsmanship and civil virtuousness reduced emotional burnout, virtuousness and courtesy reduced desensitisation, while altruism, conscientiousness, sportsmanship, courtesy and civil virtuousness positively and significantly predicted personal success. Çetin, Basım and Aydoğan (2011) discovered that employees' burnout levels decreased as their emotional commitment, which prioritises efforts for the good of the organisation, increased. Moreover, there are findings that show a negative relationship between a trust-based school environment and burnout. More specifically, as the trust in colleagues, principals and students increased, desensitisation and emotional burnout decreased (Çağlar, 2011). In a study on collective efficacy, which refers to a common awareness towards individuals' perception of competence Gürçay, Yılmaz and Ekici (2009) found a negative relationship between teachers' collective efficacy perceptions and emotional burnout. Çam-Tosun and Altunay (2017) demonstrated that being a learner organisation, which refers to characteristics including team learning, mental models, shared vision and individual dominance, was negatively related to burnout. In this context, it can be stated that strong school culture and increasing organizational trust in the school will decrease teacher burnout.

School climate: Research findings show that teachers' burnout levels are related to intimidation and political behaviours. Okçu and Çetin (2017) determined that task-oriented and job-oriented intimidation increased burnout. Karakuş and Çankaya (2012) reported that psychological violence in school was positively related to burnout, and psychological violence was a significant predictor of burnout. In addition, Erkutlu (2012) found that teachers' exhibiting political behaviours based on self-interest increased their burnout. Accordingly, it can be interpreted that positive atmosphere and empathy-based relationships in the school may reduce teacher burnout.

Table 2 presents the variables that increase and decrease teacher burnout.

Table 2. Factors related to teacher burnout

Factors negatively related to burnout	Factors
Belief in advanced professional competence	<ul style="list-style-type: none"> • Teachers' strong self-efficacy beliefs • Strong beliefs regarding professional competence
Positive feelings and views	<ul style="list-style-type: none"> • Being psychologically strong individuals • Having positive feelings and perspectives • Controlling and regulating feelings
High job satisfaction	<ul style="list-style-type: none"> • Job satisfaction being high • Intrinsic job satisfaction being high
Administrative support	<ul style="list-style-type: none"> • Administrators' supportive, guiding and reassuring behaviours • Administrators' valuing individuals and sincerity
Environment of cooperation, support and trust	<ul style="list-style-type: none"> • Cooperative environment in school • Trust-based relationships • Helpfulness and behaviours that prioritise the organisation • Colleague support and having common objectives and beliefs
Controlling and suppressing feelings and views	<ul style="list-style-type: none"> • Suppressing or hiding feelings • Showing insincere behaviours instead of natural behaviours • Efforts to over-control feelings
Factors positively related to burnout	Factors
High expectations	<ul style="list-style-type: none"> • Having high expectations related to the school and education
Emotional instability	<ul style="list-style-type: none"> • Having a personality that is prone to depression
Disciplinary problems in school	<ul style="list-style-type: none"> • Student misbehaviour in the classroom
Supervisory teacher behaviours	<ul style="list-style-type: none"> • Over-prescriptive teacher approach in relationships with students
School climate	<ul style="list-style-type: none"> • Psychological violence among employees • Political school atmosphere • Heavy work load
Having high locus of control	<ul style="list-style-type: none"> • Having external locus of control
Being old	<ul style="list-style-type: none"> • Increased perception of personal success • Increased desensitisation

The factors that increase and decrease teacher burnout, as is reported in the current literature, are presented in Table 2. The factors that reduce burnout include variables such as the belief in advanced professional competence, positive feelings and views, high job satisfaction, administrative support, and the environment of cooperation, support and trust. On the other hand, the factors that increase burnout include variables such as over-controlling and suppressing feelings and views, unrealistic and high expectations towards the school and education, emotional instability, student misbehaviours in the classroom, supervisory teacher behaviours, negative school climate and high external locus of control. Besides, individuals' age may be negatively or positively related to burnout.

4. DISCUSSION AND RESULTS

This systematic review presents an analysis of the studies focusing on teacher burnout in Turkey and conducted in accordance with the relational survey model. There were organisational and individual variables that were related to burnout in the studies examined. Organisational variables were job satisfaction, perceived administrative support, cooperative environment, support and trust, student misbehaviours in the classroom and a negative school climate. Similar findings can also be encountered in systematic reviews compiling the findings of studies on burnout. In the empirical studies examining the stress and burnout of social workers, factors such as work pressure, work load, role ambiguity and executive relationship were identified as organizational determinants of burnout (Lloyd, King ve Chenoweth, 2002). In a similar study, negative working environment, workload, role ambiguity and long working hours were determined to be the primary factors that affect burnout in healthcare professionals (Bria, Baban & Dumitrascu, 2012). In a review of quantitative studies on special education teachers' burnout, Brunsting, Sreckovic and Lane (2014) determined that role conflicts, role

ambiguity and administrative support were influential on teacher burnout. Ghanizadeh and Jahedizadeh (2015) found that teacher burnout was caused by a set of factors such as working conditions, attitudes, self-efficacy, personality type and role conflicts. Chang (2013) reported that organisational factors comprised of class size, job demands, role ambiguity, teacher readiness, rigid organisational structure and decision making processes. Transactional factors corresponded to teacher attitudes towards student misbehaviour, teachers' perceptions of leadership styles, perceived administrative support, norms in teacher-student relationships and job satisfaction. In this situation, it is understood that the principals' non-participatory management approach and teachers' having too much responsibilities lead to teacher burnout. Therefore, it shows that school principals play important roles in eliminating these conditions which have negative effects on teacher effectiveness. It is indicated that teacher burnout will decrease if school principals establish open relationships with teachers, take the opinions of teachers in school-related decisions, reduce teachers' workloads and make job descriptions with the aim of solving school related problems that teachers face.

Individual variables included professional competence beliefs, positive feelings and views, over-controlling or suppressing feelings and views, personality that is open to emotional instability, high external locus of control and unrealistic expectations related to the school and education. Like this study, Lloyd, King and Chenoweth (2002) found that the individual determinants of burnout were low business autonomy, difficulties in providing services to customers, and low professional self-esteem. Ishak et al. (2013) found that burnout affected their life quality, safe patient care, the quality of learning and instruction, and depressive and suicidal tendencies. Chang (2013) reported that individual factors included age, gender, marital status, seniority, personality, self-awareness, teacher silence and strategies for coping with stress. In another review, Ghanizadeh and Jahedizadeh (2015), emphasised individual factors that reduced teacher burnout. The individual factors were elements such as teachers' beliefs and perceptions related to instruction, their development of leadership skills, problem solving and conflict resolution. It was found that factors such as teachers' ability to manage teaching process, their problem solving skills, self-awareness skills, life quality, their ability to do work, their age, seniority and sex increased the burnout. Therefore, it can be said that providing trainings in teacher training process on how to cope with existing problems that they may experience throughout their teaching process may decrease teacher burnout. In addition, it was argued that vocational in-service trainings which address problems already experienced by current teachers might also reduce individual burnout.

Based on the results of this review, it can be argued that teacher burnout has professional, psychological, social and organisational aspects. In order to reduce or prevent teacher burnout, it can be suggested that teachers should be supported psychologically, and if necessary, they should receive expert assistance and attend trainings related to in-class communication. On the other hand, the results show that school administrators can have an indirect influence on the reduction of teacher burnout by forming a strong support culture. Consequently, school administrators always be in touch with teachers, show individual interest to them and establish trust-based relationships with them. In addition, the effectiveness of intervention programs can be investigated to reduce teacher burnout. Longitudinal and mixed-method studies can be conducted to reveal the causes of burnout more comprehensively. Systematic reviews on teacher burnout are quite limited in the Turkish context, and thus a similar systematic review on teacher burnout can be carried out by covering master's and doctoral theses and dissertations.

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Geniş Özet

İş tükenmişliği 1970’li yılların başından itibaren psikoloji alan yazınının ve kültürel tartışmaların odağında yer alan önemli kavramlardan biri olmuştur. Bu kavram farklı iş kollarında tartışılmıştır. Bununla birlikte son yıllarda öğretmen tükenmişliğinin yoğun biçimde uluslararası ve ulusal alanyazında ele alınmaya başlandığı görülmektedir. Bu bağlamda öğretmen etkililiğinin önemli bir yordayıcısı olarak görülen tükenmişlikle ilgili ulusal alanyazındaki çalışmaların incelenmesi alanyazına katkı sağlayacağı düşünülmektedir. Sistematik derleme olarak desenlenen bu araştırma 2000-2017 yılları arasında yayınlanan EBSCO, ERIC, SCOPUS, ULAKBİM veri tabanlarında yer alan ve Türkiye örneklemeyle sınırlandırılan 33 makale değerlendirilmeye alınmıştır.

İlgili uluslararası alan yazında tükenmişlik kavramına yönelik sistematik inceleme ve meta-analiz çalışmalarının da yapıldığı görülmektedir. Bu sistematik inceleme yoluyla tükenmişliğe ilişkin araştırmaların bütünleştirilmesi, tükenmişlik kaynaklarının ve sonuçlarının ortaya konulması amaçlanmıştır. Ancak ulusal alan yazında öğretmen tükenmişliğine ilişkin yapılan araştırmaların sistematik bir biçimde değerlendirilmesi veya gözden geçirilmesine ilişkin herhangi bir araştırmayla karşılaşılmağı. Ulusal alan yazında öğretmen tükenmişliğine ilişkin yapılan araştırmaların bir bütün olarak değerlendirilmesi ile öğretmen tükenmişliğine ilişkin yapılan ampirik araştırmaların eksik yönlerinin tespit edilmesi bakımından önemlidir. Dolayısıyla mevcut araştırmanın alan yazındaki bu boşluğu doldurması beklenmektedir. Ayrıca bu araştırmanın bulguları, öğretmen tükenmişliğine neden olan faktörleri ve öğretmen tükenmişliğinin sonuçlarını ortaya koyması bakımından gelecek araştırmalar için yön belirleyici bir nitelik taşıyabilir. Bununla birlikte mevcut araştırmadan elde edilecek bulgular, öğretmen tükenmişliğinin önlenmesine yönelik olarak politika yapıcılar için önemli bir veri kaynağını teşkil edebilir. Bu kapsamda araştırmanın temel amacı, öğretmen tükenmişliğinin belirleyicilerini ve tükenmişlikle ilişkili faktörleri ortaya koymaktır. Bu bağlamda mevcut araştırmada aşağıdaki sorulara yanıt aranmıştır:

- i. Hangi değişkenler öğretmen tükenmişliği ile ilgilidir?
- ii. Öğretmen tükenmişliğinin sonuçları nelerdir?

Mevcut çalışmaya dahil edilen araştırmalar; (i) öğretmen tükenmişliğini araştıran korelasyonel çalışmalardan oluşması, (ii) 2000-2017 yılları arasında ulusal ve uluslararası hakemli dergilerde yayımlanmış olması, (iii) Türkiye örneklemindeki öğretmenleri kapsamı, (iv) araştırmanın problemlerine yönelik bulguları bulundurması, (v) üniversiteler dışındaki örgün eğitim kurumlarında yapılmış olması ve (vi) nicel araştırma yöntemi ve ilişkisel tarama modelinde desenlenen çalışmalardan oluşması gibi ölçütlerle sınırlandırılmıştır. Araştırmaya tezler ve raporlar dahil edilmemiştir. *Tarama*. Araştırmaların tarama sürecinde ilk olarak Türkiye örneklemeyle sınırlandırılan EBSCO, ERIC, SCOPUS, ULAKBİM veri tabanlarına girilen “*öğretmenlerin tükenmişliği, teacher(s) burnout*” anahtar sözcükleriyle toplam 204 çalışmaya ulaşılmıştır. İkinci aşamada araştırmanın amacı doğrultusunda iş tükenmişliğiyle ilişkili olmayan 145 makale değerlendirme dışında bırakılmıştır. Üçüncü aşamada geriye kalan 59 çalışma arasında veri tabanlarında tekrarlanan 26 makale elenmiştir. Sonuç olarak toplam 33 makale sistematik derlemeye dahil edilmiştir.

Verilerin toplanması sürecinde araştırmaya dahil edilme ölçütlerine bağlı olarak ilk aşamada bir değerlendirme formu oluşturulmuştur. Oluşturulan bu form aracılığıyla araştırmacılar tarafından belirlenen veri tabanlarında makale taraması yapılmıştır. Tam metnine ulaşılan makaleler bilgisayar ortamına kaydedilerek M1, M2, M3...M33 şeklinde kodlanmıştır. İkinci aşamada Microsoft Office Excel programı yardımıyla incelemeye alınan araştırmaların yazarları, konuları, ilişkili olduğu kavramlar, örneklemeler, kullanılan ölçekler ve bulgular başlıkları altında kategorilere ayrılmıştır. Tabloya aktarılan 33 çalışmanın kaliteleri EPPI-Centre çalışması ve Gough, Oliver ve Thomas tarafından oluşturulan kanıtların ağırlıklarının değerlendirilmesi çerçevesine göre değerlendirilmiştir. Bu araştırmaların metodolojik kaliteleri, metodolojik ilgi ve konu başlığı ilgisinin bir bütün olarak değerlendirilmesi ise kanıtların gücünü ortaya koymaktadır. Bu bağlamda incelenen çalışmaların iyi tasarlanması, çalışmalarını

kanıt bakımından güçlü hale getirmektedir. Bunun yanında metodolojinin ve seçilen konuya göre bulunan makalelerin konu başlıklarının yakın olması incelenen çalışmalardaki kanıtları güçlendirmektedir. Bu bakımdan üç araştırmacı da kalite kontrol listesi hazırlayarak çalışmaların kalitelerine 1 ile 4 arasında değerler vererek değerlendirmişlerdir. Bulguların sentezi sürecinde makaleler araştırma problemine uygun biçimde özetlenmiş ve kodlar oluşturulmuştur. Analiz edilen kodlar sınıflandırılarak ortak temalar oluşturulmuştur.

Mevcut sistematik inceleme çalışması, Türkiye’de öğretmenlerin tükenmişliklerine yönelik ilişkisel tarama modelinde desenlenen çalışmaların analizini sunmaktadır. Araştırmalarda tükenmişlik ile ilişkili bireysel ve örgütsel değişkenlerin olduğu görülmektedir. Bireysel değişkenler mesleki yetkinlik inancı, pozitif duygu ve düşünceler, duygu ve düşünceleri aşırı kontrol etme ya da bastırma çabası, duygusal dengesizliğe açık kişilik yapısı, yüksek dış denetim odağı ve eğitim ve okulla ilgili gerçekçi olmayan yüksek beklentilere sahip olma, gözetimci öğretmen davranışlarıdır. Yaş değişkeni ise tükenmişlikle pozitif ya da negatif ilişkili olabilmektedir. Örgütsel değişkenler ise mesleki doyum, algılanan yönetici desteği, iş birliği ortamı, destek ve güven ortamı, sınıfta istenmeyen öğrenci davranışları ve olumsuz okul iklimidir.

Bu çalışmadan elde edilen sonuçlara göre öğretmen tükenmişliğinin mesleki, psikolojik, sosyal ve örgütsel yönlerinin olduğu ifade edilebilir. Öğretmenlerin tükenmişliklerinin azaltılmasında ya da önlenmesinde öğretmenlerin psikolojik olarak desteklenmeleri, gerekiyorsa uzman yardımı almaları ve sınıf içi iletişim ile ilgili eğitimlere katılmaları önerilebilir. Diğer taraftan sonuçlar okul yöneticilerinin öğretmen tükenmişliğinin azaltılmasında güçlü bir destek kültürü oluşturarak dolaylı etkilerinin olabileceğini ortaya koymaktadır. Bu bağlamda okul yöneticilerinin öğretmenlerle sürekli iletişim ve etkileşim içinde olmaları, öğretmenlere bireysel ilgi göstermeleri ve öğretmenlerle güven temelli ilişkiler kurmaları önerilebilir. Bununla birlikte, öğretmen tükenmişliğini azaltmaya yönelik müdahale programlarının etkililiği araştırılabilir. Tükenmişliğin nedenlerini daha kapsayıcı biçimde ortaya koymaya yönelik boylamsal ve karma çalışmalar planlanabilir. Öğretmen tükenmişliği ile ilgili sistematik derlemeye yönelik ulusal alan yazındaki çalışmaların yetersiz olduğu görülmektedir. Bu bakımdan öğretmen tükenmişliğine yönelik benzer bir sistematik derleme yüksek lisans ve doktora tezleri ele alınarak yapılabilir.