



## A Meta-Analysis of the Relationship Between Teachers' Job Satisfaction and Burnout \*

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### ABSTRACT

**Purpose:** Given the inconsistency among research studies on the relationship between burnout and job satisfaction of teachers in Turkey, it is of great importance to combine and interpret the results of such studies. In this regard, this study aims to examine the size and direction of relationships between job satisfaction and dimensions of burnout, and to determine the possible effect of moderator variables on these relationships.

**Research Method:** The study was designed using a meta-analysis method. Identified as appropriate to the specified inclusion criteria, 15 studies for emotional exhaustion and depersonalization and 14 for reduced personal accomplishment were included in this meta-analysis. The total sample size of the included studies was 3,778 for emotional exhaustion and

depersonalization, and 3,455 for reduced personal accomplishment. In the study, the possibility of a publication bias was examined. The included studies were determined to be heterogeneous. A random-effects model was used in the computation of effect sizes.

**Findings:** In the study, the relationships between job satisfaction and emotional exhaustion and between job satisfaction and reduced personal accomplishment were found to be negative and at a medium level, whereas between job satisfaction and depersonalization the relationship was found to be negative and at a low level. For study-type and grade-level moderators, the variance among studies did not statistically differ.

**Implications for Research and Practice:** Teachers' higher emotional exhaustion, depersonalization, and reduced personal accomplishment relatively reduce their job satisfaction. Further research might be beneficial in favor of extending the generalization in specific cultures and in combining inconsistent research results existing in literature.

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## Introduction

In social sciences literature, there has been a dramatic increase in the number of studies examining the relationship between job satisfaction and burnout. In the national database of Turkey's Higher Education Council (HEC) alone, 37 graduate theses examining the relationship between job satisfaction and the burnout of employees can be found. Of these, 23 were published between the years 2010 and 2016. When the findings of all this research is examined, what is remarkable is the varying results of these studies. However, combining the results of such independently conducted studies can be significant in terms of producing valid and reliable information. Furthermore, the examination of such relationships specific to teachers might contribute to the production of generalizable information with regard to educational organizations. For this reason, a meta-analysis aimed at determining the relationship between job satisfaction and the burnout of teachers has been performed as part of the scope of this research.

The subject of job satisfaction has attracted many scholars' attention since the 1920s and Elton Mayo's factory experiments, which tied increased attention to workers' conditions to increased productivity (Tillman & Tillman, 2008). These studies are based on the assumption that individuals become happier and more productive by also reaching their own workplace aims alongside working toward the aims of organizations. In this day and age, job satisfaction occupies an important place in the overall achievement of organizations. In parallel with this judgement, job satisfaction has become an important aim for organizations (Yılmaz, 2012). Because, the ability of organizations to benefit from individuals' expertness, by providing and sustaining collaboration, is only possible by ensuring the job satisfaction of employees (Locke, Schweiger, & Latham, 1986).

Job satisfaction, in general, is associated with what is felt by individuals for the various aspects of their job (Spector, 1997). There are many definitions regarding this concept in the related literature. There are researchers expressing job satisfaction as: a positive emotional state (Inandi, Tunc, & Uslu, 2013), a positive impact of job experiences on individuals (Filiz, 2014), and employees' perceptions regarding their jobs (Altinkurt & Yılmaz, 2014). As understood by these definitions, job satisfaction is associated with what an individual feels for his or her job and with contentment levels. To ensure job satisfaction, meeting the needs and expectations of the employee is of vital importance. The rapport between the conditions of an individual and a job (Locke, 1975) is also of great importance. In order to ensure such a rapport, there should be similarities between the purposes of employees and organizations.

Job satisfaction can be asserted to profit not only employees, but also organizations and their success. Employees with a high level of job satisfaction have positive opinions about their organizations and, therefore, put in more effort than expected (Yılmaz, 2012). In addition, high job satisfaction reduces absenteeism by employees, increases voluntary behaviors, and ensures greater happiness in other aspects of life. On the other hand, low job satisfaction can lead to alienation and negative attitudes toward the job (Altinkurt & Yılmaz, 2014). Such negative emotions

might remain over time and cause employees to feel themselves under pressure and to experience burnout.

The concept of burnout began to be used in the 1970s in connection with individuals whose work involved frequent face-to-face interactions (Maslach, Schaufeli, & Leiter, 2001). Maslach (1993) identified burnout as an individual stress source arising from complicated social relations and shaped by perceptions related to self and the environment. In this sense, burnout can be described as the psychological reaction of employees against negations in the workplace. Maslach et al. (2001) further conceptualizes burnout as multidimensional, consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is the feeling of having depleted emotional resources and having nothing else left to do for one's job. Another dimension of burnout, depersonalization, is the demonstration of negative and indifferent manners toward colleagues in order to cope with intense work pressure and work overload. Reduced personal accomplishment, meanwhile, is described as an individual's self-perception of being insufficient and unsuccessful in the job and not as productive as expected. These dimensions deal with different aspects of burnout. Emotional exhaustion is associated with an individual stress dimension, depersonalization with an interpersonal dimension, and reduced personal accomplishment with a self-evaluation dimension.

Burnout both affects individuals' personal lives negatively and gives rise to them having problems in their jobs. For instance, burnout can significantly impact individuals by way of personality disorder, physical depletion, and family problems. It also affects organizations in that it leads to a decrease in the quality of service and an increase in employee turnover rates (Maslach, Jackson, & Leiter, 1996). However, some researchers regard burnout as a social problem beyond these issues. (Lackritz, 2004; Maslach, 1993). Burnout as experienced by teachers likewise has individual and organizational consequences. As teachers have a substantial role in the future of societies, teachers' burnout might cause structural problems for society.

In the literature, many studies regarding the burnout and job satisfaction of employees in educational organizations are encountered. Among these studies, there are also meta-analyses examining teachers' burnout and job satisfaction levels in terms of demographic variables. Within such studies, gender, grade-level, marital status, seniority, school-type, and subject-matter variables were found to have a low-level effect on the burnout of teachers (Doguyurt, 2013; Weng, 2004; Yorulmaz, 2016). Similarly, gender was found to have a low-level effect on teachers' job satisfaction in a meta-analysis study conducted by Aydin, Uysal, and Sarier (2012). There are meta-analysis studies examining the burnout and job satisfaction of teachers in terms of various personal and organizational variables, as well. Among these, the relationships between burnout and perceived stress and organizational support (Stewart, 2015), classroom management skills (Aloe, Amo, & Shanahan, 2013), undesired student behaviors (Aloe, Shisler, Norris, Nickerson, & Rinker 2014), and mobbing (Iri, 2015), and between job satisfaction and organizational commitment (Yutcu, 2015) were examined. However, meta-analysis or meta-evaluation studies

examining the relationship between job satisfaction and the burnout of teachers have not been broached. As a result, the purpose of this study was to determine the relationship between job satisfaction and burnout with regard to teachers. Within the scope of this purpose, the possible effect of study-type and grade-level moderators on relationships between job satisfaction and emotional exhaustion, depersonalization, and reduced personal accomplishment were also investigated.

## Method

### *Research Design*

In the determination of relationships concerning job satisfaction and burnout of teachers in Turkey, a meta-analysis method was used. Meta-analysis refers to a quantitative procedure used to statistically combine the results of individual studies (Cooper, 2017).

### *Data Collection Procedure*

The data of the research were collected in December 2016. In order to reach the included studies, Web of Science, ERIC, ULAKBIM, EBSCOhost, Google Scholar, and HEC databases were searched with such key words as "burnout," "emotional exhaustion," "depersonalization," "(reduced) personal accomplishment," "job satisfaction," and "Maslach," and their Turkish equivalents. Following this search, a total of 98 studies including 58 articles and 40 graduate theses were obtained. Subsequent to the examination of the studies reached through the databases, specific criteria were determined for inclusion of the studies in the meta-analysis. These criteria were as follows: 1) Studies should be articles or graduate theses published between 2005 to 2016. 2) The aim of the studies should be determining the relationship between job satisfaction and burnout of teachers working at pre-school, elementary, lower-secondary, or upper-secondary schools in Turkey. 3) The findings of the studies should include sample size and correlation coefficients or any other statistics to compute these values. 4) In cases where articles were produced from the theses, the studies including more data should be included in the meta-analysis. 5) Data of the studies must be collected with the Maslach Burnout Inventory (MBI) and include findings regarding the dimensions of the MBI. The criterion "data being collected with the MBI" was not determined as a criterion at the beginning of the research. However, it was observed that the data of all the included studies were collected with the MBI and it was not empirically fitted with any other data collection instrument by which the burnout was measured, because it was not possible to obtain a total score through the MBI. For this reason, "data being collected with the MBI" was decided upon as a criterion.

In the study, a coding key was created to set the characteristics of the studies reached through the databases. This coding key included information about the author(s) of the study; the year published; topic of the research; type (qualitative, quantitative, mixed or theoretical); sample and sample size; the name, developers, and validity and reliability proofs of the data collection instruments used; and the

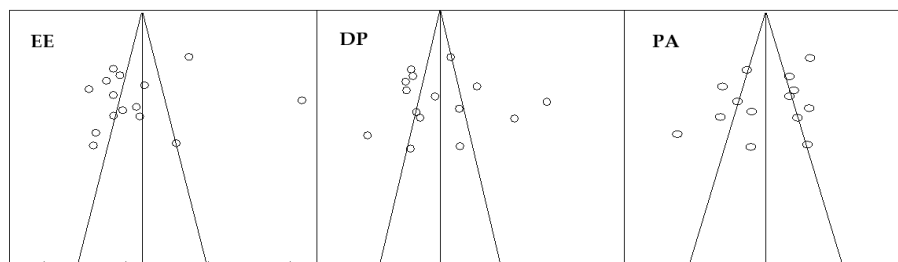
availability of the data regarding relationships between job satisfaction and burnout. Through this coding key it was determined that, out of 98 studies, 70 would not be included in the meta-analysis as their samples did not meet the inclusion criteria, and a further 13 were rejected as not including appropriate data. Then, a second coding key was created, which consisted of the data regarding the author(s), sample sizes, and correlation coefficients of the studies.

#### Research Sample

Meeting all the inclusion criteria, 15 studies in terms of emotional exhaustion and depersonalization, and 14 in terms of reduced personal accomplishment dimensions of burnout, were included in the meta-analysis. The total sample size of the included studies was 3,778 for emotional exhaustion and depersonalization, and 3,455 for reduced personal accomplishment.

#### Publication Bias

Publication bias refers to the possibility that the published studies may not be representative of all studies conducted in a specific topic (Rothstein, Sutton, & Borenstein, 2005). Publication bias also pertains to the fact that overall effect sizes are biased toward studies finding statistically significant effects, where included studies are selected from the published literature (Pigott, 2012). Publication bias above a critical level causes effect sizes to seem higher than what they normally are (Borenstein, Hedges, Higgins, & Rothstein, 2009). With this in mind, the possibility of a publication bias was examined using funnel plots, Orwin's Fail-Safe N analysis, Duval and Tweedie's Trim and Fill, and Egger's regression test before computing the effect sizes. The funnel plots regarding the effect sizes computed for the relationships between job satisfaction and emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA) are shown in Figure 1.



**Figure 1.** Funnel plots: The effect size of the relationship between job satisfaction and burnout.

Funnel plots are regarded as instruments that can visually express the possibility of a publication bias in meta-analysis (Sterne, Becker, & Egger, 2005). In cases where there is no publication bias observed through the funnel plots, the effect sizes are symmetrically scattered around the vertical line indicating the combined effect size (Borenstein et al., 2009; Sterne et al., 2011). Whereas effect size estimates of studies with smaller samples are widely scattered at the lower part of the funnel plots,

studies with bigger samples are scattered narrowly at the upper part of the diagram (Sterne et al., 2011). In cases where there is publication bias in the meta-analysis, studies are asymmetrically scattered around the funnel plots (Sterne & Egger, 2001). When the funnel plots in Figure 1 were examined, it was observed that the studies were nearly symmetrically scattered around the vertical line, signifying the general effect size, and they were mostly accumulated in the upper part of the funnel plots. However, the funnel plots did not provide sufficient proof regarding publication bias. That is why this finding was also supported by Orwin's Fail-Safe N analysis, Duval and Tweedie's Trim and Fill, and Egger's regression test (Table 1).

**Table 1.**

*Results of Publication Bias Tests*

	<i>Orwin's Fail-Safe N*</i>	<i>Duval and Tweedie</i>		<i>Egger's Test</i>
	<i>Studies Required</i>	<i>Trimmed Studies</i>	<i>Observed/Filled</i>	
EE	589 for -.01 Fisher's $\zeta$	5	-.430 (-.317)	$p=.520$
DP	274 for -.01 Fisher's $\zeta$	3	-.184 (-.111)	$p=.814$
PA	362 for -.01 Fisher's $\zeta$	1	-.306 (-.326)	$p=.181$

\*Number of missing studies needed to bring Fisher's  $\zeta$  over -.01

Orwin's Fail-Safe N analysis computes the number of required (missing) studies for the combined effect sizes to reach the determined critical value (Orwin, 1983). According to Table 1, Orwin's Fail-Safe N analysis results reveal there was no need to include more studies in the meta-analysis in order to bring Fisher's  $\zeta$  coefficient over the "trivial" -.01 value. The evidential values refer to the absence of a publication bias in the meta-analysis.

Duval and Tweedie's test determines the new center of the funnel plot by trimming the studies which lead to an asymmetry in the diagram, and computes the new combined effect size by filling the trimmed studies with their symmetrical equivalents around the center of the diagram (Duval & Tweedie, 2000; Higgins & Green, 2008). According to Table 1, subsequent to studies being trimmed from the funnel plots, the new (filled) effect sizes did not considerably differ from the observed effect sizes. This finding also proves there was not a publication bias in the meta-analysis study.

Another instrument used to determine publication bias in meta-analysis, Egger's linear regression test, reveals the symmetry of funnel plots through the results of "p" significance tests (Sterne & Egger, 2001); a result which is not significant ( $p>.05$ ) indicates no publication bias observed in the meta-analysis. According to Table 1, the results of Egger's regression test were not significant for all three dimensions, confirming there was no publication bias in this meta-analysis. After determining that there was no bias in the study, a heterogeneity test, model selection, and effect size computations were performed.

*Heterogeneity*

In this meta-analysis, heterogeneity tests were conducted before computing effect sizes. The heterogeneity concerning the effect sizes of the included studies are identified with the Q test. In cases where the Q value exceeds the degree of freedom and the critical  $\chi^2$  value, the effect sizes are assumed to be heterogeneous (Card, 2011). Even though the Q statistics and significance test give evidence regarding the heterogeneity of the combined studies, they do not clarify the level of heterogeneity. Therefore, I<sup>2</sup> statistics were used to explain the heterogeneity level of the combined studies. Another advantage of I<sup>2</sup> statistics is that they are not directly affected by the number of studies in meta-analysis (Cooper, Hedges, & Valentine, 2009; Higgins & Thompson, 2002). The I<sup>2</sup> value can also be used to compare the heterogeneity results of different meta-analysis studies as it provides information about the heterogeneity level (Card, 2011). I<sup>2</sup> values lower than 25% are regarded as low, equal to 50% as medium, and higher than 75% as a high level of heterogeneity (Cooper et al., 2009; Pigott, 2012). The Q statistics and I<sup>2</sup> values regarding the heterogeneity of studies included in this meta-analysis are shown in Table 2.

**Table 2.**

*Heterogeneity of Studies Included in This Meta-Analysis*

<b>Job Satisfaction</b>	<b>k</b>	<b>Q</b>	<b>I<sup>2</sup></b>
Emotional Exhaustion	15	343.902	95.929
Depersonalization	15	229.884	93.910
Reduced Personal Accomplishment	14	116.345	88.826

*k: Number of studies included in meta-analysis*

As seen in Table 2, the Q values used to determine heterogeneity were computed as 343.902 ( $df_{(Q)}= 14$ ;  $p=.00$ ) for emotional exhaustion, 229.884 ( $df_{(Q)}= 14$ ;  $p=.00$ ) for depersonalization, and 116.345 ( $df_{(Q)}= 13$ ;  $p=.00$ ) for reduced personal accomplishment. The I<sup>2</sup> values were computed as 95.929 for emotional exhaustion, 93.910 for depersonalization, and 88.826 for reduced personal accomplishment. The computed values indicate a high level of heterogeneity among the included studies.

*Data Analysis*

In meta-analysis studies, models to be used (fixed- or random-effects models) should be selected before computing the effect sizes. If effect sizes are computed by the fixed-effects model based on a homogeneity assumption, variance among the studies is accepted to result from only sampling error. On the other hand, if effect sizes are computed by the random-effects model based on a heterogeneity assumption, the variance among studies is considered to be based on different samples of individuals within each study (Higgins & Green, 2008; Pigott, 2012). The purpose of a random-effects model is not to estimate one true effect, but to estimate the mean of the distribution of effects among the included studies (Borenstein et al., 2009). Another important consideration in deciding between fixed- and random-effects models is the type of conclusion to be drawn. While conclusions from a fixed-

effects model is limited only to the sample of the studies included in the meta-analysis, conclusions from random-effects models allow more generalizable conclusions (Card, 2011). In addition, the random-effects model is suggested if the included studies are selected from the published literature (Borenstein et al., 2009). Furthermore, it is recommended by Basol (2016) that an a priori decision be made and the random-effects model be used in cases where the included studies vary with regard to design, scope, sample, and examined variables. Therefore, the effect sizes for this analysis were computed according to the random-effects model, and heterogeneity tests were conducted to prove that the included studies were heterogeneous.

In meta-analysis studies, the variance depends strongly on correlation coefficients ( $r$ ) (Borenstein et al., 2009). For this reason, correlation coefficients were transformed into Fisher's  $z$  coefficient for computing the effect sizes, and analyses were conducted through the transformed coefficients. Afterwards, Fisher's  $z$  was re-transformed into correlation coefficient ( $r$ ) so as to state the general correlation and confidence intervals. In all computations regarding the effect sizes, the confidence level was accepted as 95%. Correlation coefficients higher than .70 were accepted as high, those between .69 and .30 as medium, and lower than .29 as low level (Buyukozturk, 2009). The possible effect of study-type (articles or graduate theses) and grade-level (pre-school, elementary, lower-secondary, upper-secondary) moderators on relationships between emotional exhaustion, depersonalization, and reduced personal accomplishment were determined with the Q test and  $p$  significance test. Throughout the study, analyses were conducted using Comprehensive Meta-Analysis software.

## Results

The purpose of this study was to determine the relationship between job satisfaction and burnout. Within the scope of this purpose, relationships between teachers' emotional exhaustion, depersonalization, reduced personal accomplishment, and job satisfaction were examined. Figure 2 shows the forest plot indicating the primary studies on the relationship between emotional exhaustion (EE) and job satisfaction.

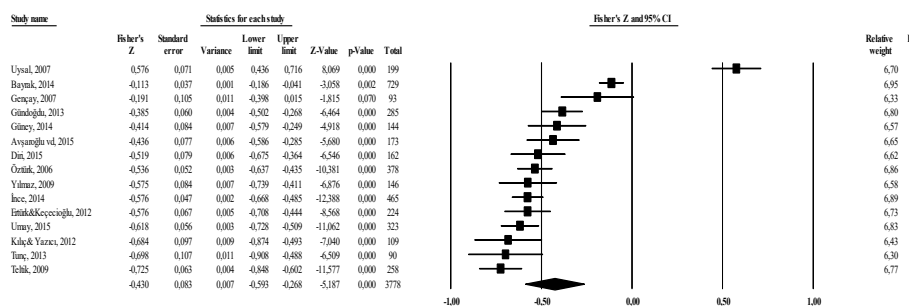


Figure 2. Forest plot of the relationship between EE and job satisfaction.

As shown by Figure 2, 15 primary studies examining the relationship between emotional exhaustion and job satisfaction were included in the meta-analysis. In



terms of emotional exhaustion, the total sample size of the included studies was 3,778, and their study weights were close to one another. The effect size ( $\zeta$ ) of the relationship between emotional exhaustion and job satisfaction computed by the random-effects model was  $-.430$ ,  $p=.00$  ( $r= -.406$ ); standard error of combined effect size was  $.083$ ; and lower and upper limits of the combined effect size were  $-.593$  to  $-.268$ . The computed values show there was a medium level of negative correlation between emotional exhaustion and job satisfaction.

Another purpose of the research was to determine the relationship between depersonalization and job satisfaction. Figure 3 illustrates the forest plot denoting primary studies on the relationship between depersonalization (DP) and job satisfaction.

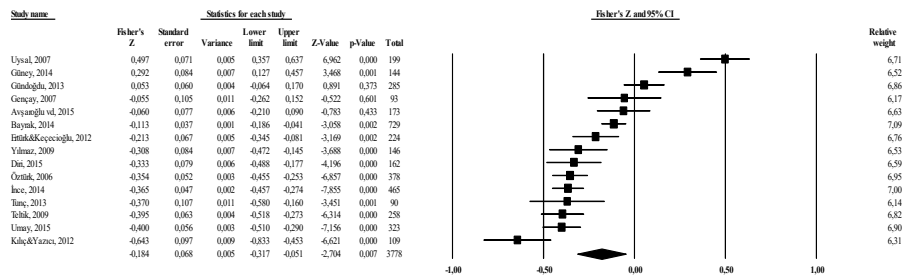


Figure 3. Forest plot of the relationship between DP and job satisfaction.

As shown by Figure 3, 15 primary studies dealing with the relationship between depersonalization and job satisfaction were included in the meta-analysis. In terms of depersonalization, the total sample size of the included studies was 3,778, and the study weights were close to each other. The effect size ( $\zeta$ ) of the relationship between depersonalization and job satisfaction, according to the random-effects model, was  $-.184$ ,  $p=.00$  ( $r= -.182$ ); standard error of combined effect size was  $.068$ ; and lower and upper limits of the combined effect size were  $-.317$  to  $-.051$ . The computed values indicate there was a low level of negative correlation between depersonalization and job satisfaction.

Another purpose to this research was to determine the relationship between reduced personal accomplishment and job satisfaction. Figure 4 displays the forest plot of primary studies on the relationship between the reduced personal accomplishment (PA) and job satisfaction of teachers in Turkey.

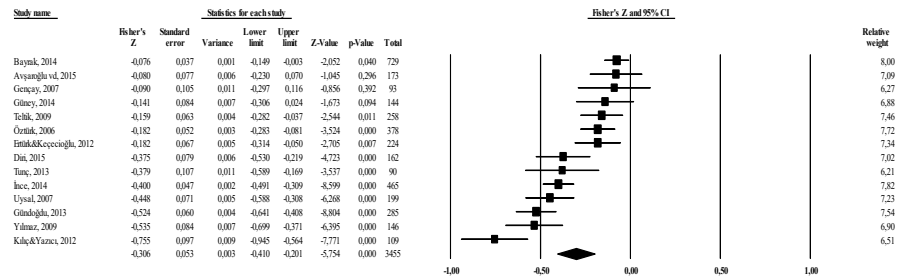


Figure 4. Forest plot of the relationship between PA and job satisfaction.

As seen in Figure 4, 14 primary studies investigating the relationship between reduced personal accomplishment and job satisfaction were included in the meta-analysis. In terms of reduced personal accomplishment, the total sample size of the included studies was 3,455, and their study weights were close to one another. The effect size ( $z$ ) of the relationship between reduced personal accomplishment and job satisfaction, according to the random-effects model, was  $-0,306$ ,  $p=0,00$  ( $r= -0,296$ ); standard error of combined effect size was  $.053$ ; and lower and upper limits of the combined effect size were  $-0,410$  to  $-0,201$ . The computed values point to a medium level of negative correlation between reduced personal accomplishment and job satisfaction.

The last purpose of the research was to determine the moderator effect of the study-type (thesis or article) and grade-level (pre-school, elementary, lower- and upper-secondary school) variables on the relationship between emotional exhaustion, depersonalization, reduced personal accomplishment, and job satisfaction. For all dimensions of burnout, the variance among studies did not differ significantly ( $p>0,05$ ) for moderator variables. Whether the included studies were theses or articles, or whether the sample of the included studies consisted of teachers working at different grades did not significantly alter the size of the relationship between job satisfaction and burnout.

## Discussion and Conclusion

This study aimed to determine the relationships between job satisfaction and emotional exhaustion, depersonalization, and reduced personal accomplishment of teachers working in Turkey. Appropriate to the specified criteria, 15 studies for emotional exhaustion and depersonalization and 14 for reduced personal accomplishment were included in the meta-analysis. The total sample size of the included studies was computed as 3,778 for emotional exhaustion and depersonalization, and 3,455 for reduced personal accomplishment.

Within the scope of this meta-analysis, 98 studies published between 2005 and 2016 examining job satisfaction and burnout in employees were identified for consideration. Of these studies, 28 examined job satisfaction and burnout with a specific reference to teachers. Among these studies, graduate theses and articles

published between 2005 and 2015 were included in the meta-analysis. However, it was remarkable that 9 of the 15 studies included in the meta-analysis were published in or after 2012. This finding has confirmed that many studies related to job satisfaction and burnout have been conducted in recent years. The included studies were conducted in different geographical regions in Turkey: one from the Mediterranean, one from East Anatolia, four from the Aegean, two from Southern East Anatolia, three from Central Anatolia, one from the Black Sea, two from the Marmara Region. Finally, one of the included studies was conducted in various provinces of Turkey. That the sample of included studies consists of research conducted in different geographical regions in Turkey contributes the generalizability of the research.

The meta-analysis study indicates that there is a medium negative correlation between emotional exhaustion and job satisfaction. When the primary studies included in the meta-analysis were examined, it was determined that the direction of the relationship between emotional exhaustion and job satisfaction was negative in all studies except one (Uysal, 2007). In terms of the size of the relationship, there were only two studies (Bayrak, 2014; Gencay, 2007) finding a low level, and one study (Teltik, 2009) finding a high level of relationship. In the rest of all the included studies, the size of that relationship was of a medium level.

As for depersonalization and job satisfaction, the relationship was found to be negative and low level. When the primary studies included in the meta-analysis were evaluated, it was seen that the direction of the relationships were negative in all studies except three (Gundogdu, 2013; Guney, 2014; Uysal, 2007). In terms of the size of that relationship, the results of the studies varied. Among the included studies, some reported the size of the relationship between depersonalization and job satisfaction as very low (Avsaroglu, Deniz, & Kahraman, 2005; Gencay, 2007; Gundogdu, 2013), while some others reported close to a high level (Kilic & Yazici, 2012; Uysal, 2007). The variety in terms of the size of the relationship among the included studies was thought to stem from the sample of the primary studies.

Another result that emerged in the study was that the relationship between reduced personal accomplishment and job satisfaction was negative, to a medium level. The direction of the relationship in all included studies was negative. However, the relationship between reduced personal accomplishment and job satisfaction was found to be at a very low level in some primary studies (Avsaroglu et al., 2005; Bayrak, 2014; Gencay, 2007), while at a medium or high level (Gundogdu, 2013; Kilic & Yazici, 2012; Yilmaz, 2009) in others.

Analyses were also conducted for moderator variables which might explain a reason for differences among the findings of the primary studies. According to the results of the moderator analyses, the primary studies' being thesis or articles, or the sample of the primary studies consisting of teachers working at different grades, did not have a significant effect on the size of the relationships for all dimensions. However, it was remarkable that the size of the relationships between job satisfaction and emotional exhaustion ( $r: -.556$ ) and job satisfaction and depersonalization ( $r: -.355$ )

were relatively higher in the studies where the sample consisted of pre-school teachers. It was also striking that the size of the relationship between job satisfaction and reduced personal accomplishment ( $r: -.274$ ) was relatively higher in studies, the study group for which was elementary schools. One rationale for this finding might be that the teachers working at these grade levels have a relatively sincere and straightforward job atmosphere, as they work at relatively smaller schools and, accordingly, have less burnout and more job satisfaction.

Burnout and job satisfaction draw attention as two subjects for which research has been conducted in the last several years in Turkey. However, researchers' deficiencies in reporting the necessary statistics required for meta-analysis do reduce the generalizability of meta-analyses. For this reason, it can be recommended that researchers pay meticulous attention to reporting the necessary statistics for their studies to be included in future meta-analyses.

This study was conducted to determine the relationship between job satisfaction and burnout of teachers. Further meta-analysis studies examining the effects of various personal or organizational variables on the aforementioned relationships could be designed. Moreover, this study is limited to examining the relationship between job satisfaction and burnout of teachers in Turkey. Designing similar meta-analysis studies, the samples for which would consist of teachers working in various countries, might contribute to the generalizability of the research results.

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## Öğretmenlerin İş Doyumları ile Tükenmişlikleri Arasındaki İlişkilerin İncelenmesi: Bir Meta Analiz Çalışması

### Atıf:

Yorulmaz, Y. I., Colak, I. & Altinkurt, Y. (2017). A meta-analysis of the relationship between teachers' job satisfaction and burnout. *Eurasian Journal of Educational Research*, 71, 175-192, DOI: 10.14689/ejer.2017.71.10

### Özet

*Problem Durumu:* Sosyal bilimler alanyazınında son yıllarda iş doyumunu ve tükenmişlik arasındaki ilişkileri inceleyen çalışmalarda önemli bir artış yaşanmaktadır. Bu araştırmaların bulguları incelendiğinde, araştırma sonuçlarının birbirinden farklılaşması dikkat çekicidir. Birbirinden bağımsız olarak yürütülen bu çalışmaların bulgularının birleştirilmesi, geçerli ve güvenilir bilgilerin üretilmesi bakımından önemlidir. Tükenmişlik ile iş doyumunu arasındaki ilişkilerin öğretmenler özelinde incelenmesi ise eğitim örgütleri bağlamında genellenebilir bilgilerin oluşmasına katkı sağlayacaktır. Alanyazında öğretmenlerin tükenmişlik ve iş doyumunu düzeylerini branş, cinsiyet, medeni durum, kıdem, okul türü ve öğrenim durumu gibi demografik değişkenler açısından inceleyen meta analiz çalışmaları yer almaktadır. Öğretmenlerde tükenmişlik ve iş doyumunun algılanan stres, örgütsel destek, sınıf yönetimi becerileri, istenmeyen öğrenci davranışları, yıldırma ve örgütsel bağlılık gibi çeşitli kişisel ve örgütsel değişkenler açısından incelendiği meta analiz çalışmaları da bulunmaktadır. Ancak tükenmişlik ve iş doyumunu arasındaki ilişkileri öğretmenler özelinde inceleyen bir meta analiz ya da meta değerlendirme çalışmasına ulaşılamamıştır. Bu nedenle, öğretmenlerin iş doyumları ile tükenmişlikleri arasındaki ilişkilerin belirlenmesine yönelik bir meta analiz çalışmasına gereksinim olduğu düşünülmektedir.

*Araştırmanın Amacı:* Bu araştırma ile Türkiye’de görev yapan öğretmenlerin tükenmişlikleri ve iş doyumları arasındaki ilişkilerin belirlenmesi amaçlanmıştır. Bu amaç doğrultusunda, öğretmenlerin iş doyumları ile tükenmişliğin boyutları olan; duygusal tükenmişlik, duyarsızlaşma ve kişisel başarısızlık alguları arasındaki ilişkilerin büyüklüğü ve yönü belirlenmiştir. Araştırmada ayrıca, iş doyumunu ile tükenmişlik arasındaki ilişkiler üzerinde etkili olduğu düşünülen çalışma türü (makale, lisansüstü tez) ve okul türü (okul öncesi, ilkokul, ortaokul, lise) değişkenlerinin ara değişken (moderator) etkisinin incelenmesi amaçlanmıştır.

*Yöntem:* Araştırma meta analiz yöntemi ile desenlenmiştir. Çalışmada yer alan araştırmalar için Web of Science, ERIC, ULAKBİM, EBSCOhost, Google Akademik ve YÖK Ulusal Tez Merkezi veri tabanları kullanılmıştır. Bu çerçevede, 58 makale ve 40 lisansüstü tez olmak üzere 98 çalışmaya ulaşılmıştır. Elde edilen çalışmalar incelendikten sonra, çalışmaların meta analize dâhil edilmesine ilişkin bazı ölçütler belirlenmiştir. Bu ölçütler: 1) Araştırmaların 2005-2016 yılları arasında tamamlanmış lisansüstü tezler ile hakemli dergilerde yayınlanmış makaleler olması, 2) Türkiye’de görev yapan okul öncesi,

ilkokul, ortaokul ya da lise öğretmenlerinin tükenmişlikleri ile iş doyumları arasındaki ilişkileri belirlemeye yönelik olması, 3) Araştırma bulgularında örneklem büyüklüğü ve korelasyon katsayısının yer alması veya hesaplanabilmesi için gerekli değerlerin verilmiş olması, 4) Lisansüstü tezlerden üretilen makaleler olması durumunda, daha fazla veri içeren çalışmanın analize dâhil edilmesi ile 5) Verilerin "Maslach Tükenmişlik Ölçeği" ile toplanmış olması ve ölçeğin boyutlarına ilişkin bulguların yer alması şeklindedir. Bu bağlamda meta analiz çalışmasına, dâhil edilme ölçütlerine uygun, duygusal tükenmişlik ve duyarsızlaşma açısından 15, kişisel başarısızlık açısından 14 çalışma dâhil edilmiştir. Meta analize dâhil edilen çalışmaların toplam örneklem büyüklükleri duygusal tükenmişlik ve duyarsızlaşma açısından 3778, kişisel başarısızlık açısından 3455'tir. Araştırmada yayın yanlılığının durumu Huni Saçılım Grafikleri, Orwin'in Güvenli N analizi, Duval ve Tweedie'nin Kırpma ve Doldurması ve Egger'in Doğrusal Regresyon Testi ile incenmiş ve araştırmada yayın yanlılığı bulunmadığı sonucuna ulaşılmıştır. Meta analize dâhil edilen çalışmaların yüksek düzeyde heterojen yapıda olduğu belirlenmiştir. Araştırmada etki değerleri rastgele etkiler modeline göre hesaplanmıştır. Etki değeri hesaplamalarında korelasyon katsayıları Fisher'ın "z" katsayısına dönüştürülmüş ve analizler dönüştürülmüş katsayılar ile gerçekleştirilmiştir. Ancak, genel etki büyüklüğüne ve güven aralıklarına ilişkin değerler raporlanırken, tekrar korelasyon katsayısına (r) dönüştürülmüştür.

*Bulgular:* Araştırmada iş doyumunu ile duygusal tükenmişlik ve kişisel başarısızlık arasındaki ilişkilerin orta düzeyde ve negatif yönde olduğu belirlenmiştir. Buna karşın, iş doyumunu ile duyarsızlaşma arasındaki ilişkinin ise düşük düzeyde negatif yönlü olduğu sonucuna ulaşılmıştır. Öğretmenlerin iş doyumları ile tükenmişlikleri arasındaki ilişkiler üzerinde etkili olabilecek yayın türü (lisansüstü tez ve makale) ve öğretim kademesi (okul öncesi, ilkököl, ortaokul, lise) ara değişkenleri için çalışmalar arası varyans istatistiksel olarak farklılaşmamaktadır. Ancak, duygusal tükenmişlik ve duyarsızlaşma açısından okul öncesi öğretmenlerinin, kişisel başarısızlık açısından ise ilkököl öğretmenlerinin tükenmişlikleri ile iş doyumları arasındaki ilişkilerin görece yüksek olduğu belirlenmiştir.

*Sonuçlar ve Öneriler:* Öğretmenlerin duygusal tükenmişlikleri, duyarsızlaşmaları ve kişisel başarısızlıklarının artması iş doyumlarını görece azaltmaktadır. Bununla birlikte, okul öncesi ve ilkököl öğretmenlerinin tükenmişlikleri ile iş doyumları arasındaki ilişkilerin büyüklüğü görece yüksektir. Bu durum, bu kademelerde görev yapan öğretmenlerin görece sıcak ve samimi bir ortamda çalışmalarından kaynaklanıyor olabilir. Tükenmişlik ve iş doyumunu Türkiye'de son yıllarda fazla sayıda araştırma yapılan konular olarak dikkat çekmektedir. Ancak, araştırmacıların yaptıkları çalışmaların ileride yapılabilecek meta analiz çalışmalarına dâhil edilebilmesi için, gerekli istatistikleri raporlama konusunda daha titiz davranmaları gerektiği söylenebilir. Bu tip araştırmalar, belirli bir kültürde genellemelere gidebilmek ve alanyazındaki tutarlı olmayan araştırma sonuçlarını birleştirmesi bakımından yararlı olabilir. Ayrıca, farklı ülkelerde görev yapan öğretmenler ile ilgili benzer meta analiz çalışmaları desenlenerek araştırma sonuçlarının genellenebilirliğine katkı sağlanabilir.

*Anahtar Kelimeler:* Araştırma sentezleme, etki büyüklüğü, duygusal tükenmişlik, duyarsızlaşma, kişisel başarısızlık, iş doyumunu.