Role of Psychological and Structural Empowerment in the Relationship between Teachers’ Psychological Capital and Their Levels of Burnout

Çağlar Kaya ¹, Yahya Altınkurt ²

Abstract

The role of psychological and structural empowerment in the relationship between psychological capital and burnout is examined in this study. Designed as a correlational survey research, the sample of the study comprises 374 teachers working in the city of Muğla, Turkey, during the 2015-2016 school year. Data of the study is collected with four data collection tools: “Positive Psychological Capital Instrument”, “Psychological Empowerment Instrument”, “Conditions of Work Effectiveness Questionnaire-II (CWEQ-II)” and “Maslach Burnout Inventory (MBI)”. The correlations between latent variables were determined according to Pearson Correlation Coefficients. According to the results of the study, psychological and structural empowerment has full mediated effects on the relationships between psychological capital and emotional exhaustion, psychological capital and depersonalization. The mediators have only partial mediated effects on the relationship between psychological capital and personal accomplishment-reverse. The model suggested in the study shows that psychological capital with psychological and structural empowerment might be effective in reducing teacher burnout. Psychological capital needs especially psychological empowerment in addition to structural empowerment. In conclusion, to prevent or reduce indications of emotional exhaustion, depersonalization and the feeling of personal failure of teachers, enhancing psychological capital of teachers with the help of psychological and structural empowerment is required.

Keywords

Psychological Capital
Psychological Empowerment
Structural Empowerment
Burnout
Emotional Exhaustion
Depersonalization
Personal Accomplishment

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Introduction

As in some professions which require intense human relations, burnout is a state that may be observed in the teaching profession. So, it is important to determine the reasons of teacher burnout. There may be various reasons of burnout amongst teachers, but in general, the reasons can be categorized into two: organizational and individual reasons (Altınkurt, Ertürk, & Yılmaz, 2015). Psychological characteristics and moods may be considered as individual factors of teacher burnout whilst organizational structure, climate and culture may be considered as organizational factors. Therefore, burnout is a state that has individual and organizational factors in a working environment.

¹ Muğla Sıtkı Koçman University, Faculty of Education, Department of Educational Sciences, Turkey, caglarkaya@mu.edu.tr
² Muğla Sıtkı Koçman University, Faculty of Education, Department of Educational Sciences, Turkey, yahyaaltinkurt@mu.edu.tr
In this research, the effects of psychological capital as an individual factor and empowerment (psychological and structural) as an organizational factor on teacher burnout are examined.

The notion of burnout may be linked to the verbal phrase “burn (verb) + out (adverb)”. Online dictionaries such as Cambridge Dictionary (2016) and Oxford Dictionaries (2016) define burnout as “physical or mental collapse caused by overwork or stress, extreme tiredness” while Merriam-Webster Dictionary (2016) defines the notion as “the condition of someone who has become very physically and emotionally tired after doing a difficult job for a long time”. According to Freudenberger (1974), the notion of “burnout” as a verb refers to failing, getting exhausted or wearing out because of using a lot of sources, energy, and power. Similarly, According to Maslach and Jackson (1981), as the authors identified with the notion of burnout in the literature, burnout is a syndrome that is most likely to be seen in socially intense professions.

As to Maslach and Jackson (1981), the notion corresponds to physical, emotional and cognitive states of people and it has three dimensions: Emotional exhaustion, depersonalization, and the tendency of evaluating oneself as a failure. Emotional exhaustion is stated as having increased negative feelings in general and decreased energy in life. As a result, an individual feels exhausted (Huberman & Vandenberghe, 2009; Maslach & Jackson, 1984). Emotional exhaustion is the beginning and the main component of burnout. Depersonalization is the aspect of burnout which reflects on human relations and affects interpersonal communication (Garden, 1987). Employee’s negative and indifferent attitudes towards the people with whom they interact are defined as depersonalization (Maslach & Jackson, 1986; Wright & Bonett, 1997). These attitudes prompt employees to depersonalization. The tendency of evaluating oneself as a failure is that employees see themselves as inadequate and unsuccessful in their work, feeling that their professional competence is diminishing (Huberman & Vandenberghe, 2009; Maslach & Jackson, 1984). According to Maslach (1981), employees who experience burnout may not be able to stand the emotional burden that their profession brings, by developing negative thoughts about themselves. As a result, they feel guilty and cannot be effective and productive at what they do.

As one of the possible opposite factors of burnout, psychological capital appears as the total of positive psychological experiences of teachers in their working environment. In addition to organizational support of schools, teachers also need to know and improve themselves. Psychological capital is defined as a positive expectation that employees will be able to cope with the challenges of their duties and a consistent behavior to maintain success (Avey, Wernsing, & Luthans, 2008; Luthans, Avolio, Avey, & Norman, 2007). In this context, the individual development of teachers can be considered within the context of positive or organizational psychological capital (Demir, 2011). To understand psychological capital, it is important to know that studies in the literature are based on the positive psychology approach (Çetin, Şeşen, & Basım, 2013). Positive psychology has its grounds from the Seligman’s book called ‘Learned Optimism: How to Change Your Mind and Your Life’, which was published in 1990. Positive psychology approach aims to focus on the positive aspects/features of people instead of focusing on negative characteristics of people (Aydın, Yılmaz, & Altunkurt, 2013; Kelekçi & Yılmaz, 2015; Seligman, 2006).

Studies on positive psychology in organizations lead us to the notion of positive organizational behavior (Luthans, 2002). Positive organizational behaviors provide a basis for better understanding of positive psychological capital (Avey, Luthans, & Youssef, 2010). Positive psychological capital, apart from other capital types, has four aspects: hope, resilience, self-efficacy, and optimism. These aspects, which are defined closely to each other in the related literature, can be briefly defined as follows (Avey et al., 2010; Luthans & Youssef, 2004; Luthans et al., 2007): Hope refers to one’s patience in reaching a goal or the ability to find new ways when needed. Resilience is one’s ability to face the difficulties around and become successful despite these difficulties. Self-efficacy indicates one’s self-confidence in overcoming difficult tasks with enough effort. Finally, optimism is one’s positive thoughts about being successful in the present or in the future.
Empowerment what can be seen as an organizational cause of employees’ burnout (O’Brien, 2010) is considered both as a structural concept in which intra-organizational power-sharing is addressed and as a psychological concept that reveals the feelings of those who end up sharing power (Ilıman Püsküllüoğlu & Altınkurt, 2017). Empowerment in the structural sense is opening the way for employees to reach knowledge, support, resources and facilities to fulfill their duties and improve themselves (Armstrong & Laschinger, 2006). In short, structural empowerment is that organizations provide a facilitative environment for employees. Organizations, therefore, need to have the opportunity and the power to empower their employees (Kanter, 1993; O’Brien, 2010; Vacharakiat, 2008). Structure of opportunity is defined as a form that supports employees on their professional development while the structure of power is defined as a form that provides reaching and using sources in an organization (Altınkurt et al., 2015). O’Brien (2010) summarizes structural empowerment as “attributes that enable employee empowerment and leads to positive employee attitudes and outcomes such as low levels of burnout”. Based on Kanter’s (1993) structural power theory, researchers attempt to find a way to measure structural empowerment in organizations. As a result of this inquiry, it is considered that structural empowerment has six dimensions: opportunity, information, support, resources, formal power and informal power (Laschinger, Finegan, Shamian, & Wilk, 2001, 2003). According to structural empowerment theory, an organization should support its employees to feel powerful. So, the structure of an organization must be designed to ease this empowerment process.

Psychological empowerment is also important for teachers in addition to structural empowerment. Conger and Kanungo (1988), who clarify the notion of psychological empowerment in the literature, define the notion as an aspect of efficacy related to motivation. In this context, psychological empowerment can be defined as motivating employees to gain self-efficacy and thereby making them feel strong (Conger & Kanungo, 1988; Meyerson & Kline, 2008). Concisely, psychological empowerment refers to employees’ enhancement of their self-efficacy. According to Zimmerman (1990), psychological empowerment is a notion that focuses on the individual and environmental aspects of empowerment. Collaboration, skill development, cultural awareness, the motivation of control, and self-efficacy are related to psychological empowerment. Based on these definitions, Thomas and Velthouse (1990) examine psychological empowerment with an “interpretive model” and the authors improve the model by adding some aspects to psychological empowerment such as a sense of impact, competence, meaningfulness, and choice. According to Spreitzer (1995), the four aspects of psychological empowerment should be meaning, competence, self-determination, and impact. These aspects explain most part of psychological empowerment. Meaning is the value of work goals or objectives. Competence corresponds to capabilities to perform activities with skills in an organization. Self-determination is the ability to decide autonomously. Finally, impact refers to influence that an individual makes to the administrative or strategic outcomes of an organization (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990).

When teachers work in an environment that lacks psychological and structural empowerment, they might experience burnout. Therefore, better psychological capital with psychological and structural empowerment may affect the possibility of experiencing burnout for teachers. Empowerment provided by an organization may also decrease the possibility of burnout as an outcome. Thus, analyzing psychological capital, psychological empowerment, structural empowerment and burnout together amongst teachers is crucial to discover the aspects of burnout profoundly and to find relationships between all these variables. Hence, we can understand why some teachers experience burnout syndrome. This may guide future efforts to diminish teacher burnout.

It is possible to find various studies on the aspects of teacher burnout in the literature (e.g. Chang, 2009; Skaalvik & Skaalvik, 2010; Yılmaz, Altınkurt, Güner, & Şen, 2015). Besides, there are some studies examining burnout with psychological capital (Altınkurt et al., 2015; Çetin et al., 2013; Peng et al., 2013) and burnout with empowerment (Çavuş & Demir, 2010; Laschinger, Wong, & Greco, 2006;
Polatcı & Özçalık, 2013). Some researchers (Gilbert, Laschinger, & Leiter, 2010; Laschinger et al., 2003) investigate the relationship between structural and psychological empowerment and burnout only with the aspect of emotional exhaustion. However, authors of this research couldn’t reach a study addressing structural and psychological empowerment, psychological capital and burnout relations together. So, this study aims to determine the role of psychological and structural empowerment on the relationship between teachers’ burnout and their psychological capital.

Method

Participants

The study is a survey model aiming to find correlations between burnout, psychological capital, psychological and structural empowerment of teachers. The population of the study consists of 9,478 teachers working in the city of Muğla, Turkey, during the 2015-2016 school year. According to calculations, a sample of 369 is enough to meet the criteria of 95% of the population. In the selection of the sample, every school in the province of Muğla was accepted as a cluster and 450 randomly selected teachers were reached with the disproportionate cluster sampling technique. However, 35 of the questionnaires were not taken into consideration because they did not meet the assumption of single and multivariate normality, 41 of which were filled without care (left blank, patterned, all marked the same option, etc.). Thus, 374 fully completed questionnaires were included in the analysis.

A sample of 374 teachers comprises 58.8% (n = 220) men and 41.2% (n = 154) women. 5.3% (n = 20) of the sample works in preschools, 25.7% (n = 96) of it works in elementary schools, 36.1% (n = 135) of it works in secondary schools, 13.9% (n = 52) of it works in high schools and finally 19% (n = 71) of it works in vocational high schools. Based on the fields of study, the sample comprises 8% (n = 30) of preschool teachers, 22.5% (n = 84) of classroom teachers, 63.1% (n = 236) of in-field-teachers and 6.4% (n = 24) of vocational high school teachers. 33.4% (n = 125) of the participating teachers has 9 or less years of working experience, 39.8% (n = 149) of them has a working experience between 10 to 19 years and 26.7% (n = 101) of them has 20 or more years of working experience.

Data Collection Tools

Data of the study is collected with four data collection tools: “Positive Psychological Capital Instrument”, “Psychological Empowerment Instrument”, “Conditions of Work Effectiveness Questionnaire-II (CWEQ-II)” and “Maslach Burnout Inventory (MBI)”. Information on these data collection tools is given below.

The Positive Psychological Capital Instrument was developed by Luthans et al. (2007) and adapted into Turkish population by Çetin and Basım (2012). Optimism, resilience, hope, and self-efficacy are the four subscales determined and the scale has a total of 24 items, 6 items for each subscale. The instrument items have six response options ranging from “1 = Strongly Disagree”, to “6 = Strongly Agree”. Higher scores from the scales are interpreted as the increase in the psychological capital level of participants. The instrument has three reverse items. In the adaptation study of the instrument, construct validity was established with Confirmatory Factor Analysis (CFA) and the goodness of fit values were reported as $\chi^2 / df = 2.18$, RMSEA = .06, CFI = .90 and TLI = .91. In the adaptation study, the reliability coefficients of the scales range between .67 and .85 while the test-retest results are between .70 and .77 for all subscales of the instrument. For this study, the Cronbach Alpha internal consistency coefficients range between .52 and .88.

The Psychological Empowerment Instrument was developed by Spreitzenr (1995). Adaptation of the scale to Turkish population was conducted by Sürgevil, Tolay, and Topoyan (2013). The instrument comprises a total of 12 items including 3 items at each subscale. The subscales are meaning, competence, self-determination, and impact. It is possible to add points from subscales and have a total score of psychological empowerment. The instrument items have five response options ranging from “1 =
Strongly Disagree”, to “5 = Strongly Agree”. The higher scores from the subscales indicate higher psychological empowerment perception of employees. Factor loading values of the subscales were found to be as follows: for the meaning subscale, they were ranging between .81 and .87; for the competence subscale, they were varying between .82 and .87; for the self-determination subscale, they were differing between .73 and .88 and finally for the impact subscale, they were ranging between .82 and .91. The goodness of fit values according to CFA results were stated as $\chi^2 / df = 1.12$, RMSEA = .022, SRMR = .090, CFI = 1.00, NFI = .97, GFI = .98 and AGFI = .98. The Cronbach Alpha internal consistency coefficients of the subscales vary between .84 and .89 for all the subscales. For this study, the Cronbach Alpha internal consistency coefficients of the subscales range between .80 and .87.

CWEQ-II was developed by Laschinger et al. (2001) and the scale was adapted into Turkish population by Sürgevil et al. (2013). They named the scale “The Structural Empowerment Scale” in Turkish. The scale comprises a total of 20 items. Only the global empowerment scale is opted out from the total score of the scales. The subscales measure opportunity, information, support, resources, formal power and informal power. The last two items are the indicators of global empowerment. All the items are answered according to an evaluation scale from “1 = Least Positive”, to “5 = Most Positive”. The higher scores from the subscales indicate higher structural empowerment perception of employees. According to the adaptation study, factor loading values of the subscales were found to be as follows: for the opportunity subscale they were ranging between .71 and .83; for the information subscale, they were varying between .83 and .88; for the support subscale, they were differing between .73 and .81; for the resources subscale, they were ranging between .65 and .88; for the formal power subscale, they were varying between .68 and .73 and finally for the informal power subscale, they were ranging between .60 and .80. All the subscales explain 77% of the total variance together. The goodness of fit values according to CFA results were stated as $\chi^2 / df = .96$, RMSEA = .000, SRMR = .046, CFI = 1.00, NFI = .98, GFI = .99 and AGFI = .99. The Cronbach Alpha internal consistency coefficients of the six subscales range between .65 and .90. For this study, the Cronbach Alpha internal consistency coefficients of the subscales range between .65 and .90.

As the last data collection tool, the MBI was developed by Maslach and Jackson (1981) and it was adapted into Turkish population by Ergin (1992). The inventory has 22 items in total with three subscales: emotional exhaustion, depersonalization, and personal accomplishment. Each subscale point is added to its own total score because it is not possible to have a total score of burnout from the MBI. Apart from the original inventory, the MBI has a 5-Likert response choice in the adaptation study. The response choices range from “1 = Never”, to “5 = Everyday”. The Personal Accomplishment subscale items are reverse items in the inventory. Thus, the scores of this subscale were reversed before including into analysis. The subscale is also named differently in Turkish, almost corresponding to a meaning like “personal failure” because of the reversal process of the items. This subscale is reported as “personal accomplishment-reverse” or mentioned as “(feeling of) personal failure” in some of the further sections to clarify the reverse calculation of the aspect in the Turkish literature. According to the adaptation study, Cronbach Alpha internal consistency coefficients of the subscales range between .71 and .83. For this study, the Cronbach Alpha internal consistency coefficients of the subscales vary between .70 and .83.

Data Analysis
Before carrying out analyses, all the questionnaires taken from the participants were checked if any of them were incomplete or imprecisely filled. Those of which are incomplete or imprecisely filled (left blank, patterned, all marked the same option, etc.) were opted out from the analyses. After the check, 409 questionnaires were seemed to be suitable. 30 of the questionnaires were omitted from the analyses because they had higher z values ($z \geq 3$) than expected. 5 of the questionnaires were excluded based on their Mahalanobis distance values. Therefore, 374 questionnaires were included in the analyses. For the determination of any multicollinearity problem, these questionnaires were examined.
based on Variance Inflation Factor (VIF) and Durbin Watson scores. Büyüköztürk (2009) states that if VIF score of a data is higher than 10, this points out a multicollinearity problem in the sampling of a research. If Durbin Watson scores range between 1.5 to 2.5, this is interpreted as there is no multicollinearity problem (Kalaycı, 2009). In the dataset of this study, VIF scores of all 374 questionnaires were found to be lower than 10 (Highest VIF score: 3.96) while Durbin Watson scores were found to be satisfactory (Lowest score: 1.75; Highest score: 1.86).

For the SEM analysis of the data LISREL 8.70 software was used. The correlations between latent variables were determined according to Pearson Correlation Coefficients. The coefficients were found to be sufficient, so the measurement and the structural models were tested. After testing the models, mediation analysis was conducted. Finally, direct, indirect and total effects amongst latent variables were estimated.

In the mediation effect analysis, Mackinnon’s (2008) two-mediators model was used. The two-mediators model is based on Baron and Kenny’s (1986) non-recursive causal model for determining a mediating role. Apart from Baron and Kenny (1986), this model allows examining multiple mediators in SEM. Baron and Kenny (1986) proposed three basic assumptions for the mediation analysis, but in the literature, there is criticism that the necessity of meeting all three assumptions is a rather rigid approach to the mediation analyses (Zhao, Lynch, & Chen, 2010). According to MacKinnon (2008), these statistical tests are like one-mediator models and may be considered as the limitations of causal steps method in models with more than one mediator. In models with two mediators, these steps are as follows: (a) the independent variable must affect the dependent variable; (b) the independent variable must affect the first mediator and second mediator separately; (c) the mediator must affect the dependent variable when the independent variable is controlled; (d) the direct effect must be non-significant for a full mediated effect.

In addition to the two-mediators model, MacKinnon’s (2008) way of calculation of coefficients was used. Direct, indirect (mediated) and total effects are more easily seen with this method. It might be helpful to clarify the notions at this point. The direct effect is the effect of independent variable on the dependent variable. The indirect effect is the effect of independent variable on the dependent variable. The indirect effect is the effect of mediator/s on the dependent variable. Finally, the total effect is the effect of both independent variable and mediator/s on the dependent variable. Coefficients of effects are important to see the power and level of relationships amongst variables in a model (MacKinnon, 2008).

In the literature, it is possible to see measurement models of all variables are tested in a single model as well as testing of all measurement models separately (Şimşek, 2007). In this study, the measurement models were tested together with the structural model. Measurement models and structural models were tested through LISREL by using Maximum Likelihood Estimation technique and covariance matrix. Chi-Square/Degrees of Freedom ($\chi^2/df$) ratio was used to test the fit index of the model. If the score of this ratio is below 3, the model is considered to be fit (Kline, 2011; Tabachnick & Fidell, 2015). Fit indicators such as GFI, AGFI, NFI, NNFI, CFI, IFI, RMSEA, and SRMR are also examined to test the goodness of fit of the model (Byrne, 2010; Kline, 2011; Tabachnick & Fidell, 2015). In a SEM, the goodness of fit values does not mean that the model is “correct”, this may only be interpreted as the model is “feasible”. In this study, 0.85 or higher values of GFI, AGFI, NFI, NNFI, CFI, and IFI are considered as “good fit” (Kline, 2011). In addition to the fit indicators mentioned, critical n is also important for SEM (Hoelter, 1983). This number for a sample size refers to the minimum number of the sample for a SEM (Hu & Bentler, 1995).
Results

Descriptive Statistics

In this section, descriptive statistics results of latent variables are presented. In Table 1, means, standard deviation values and correlation coefficients of latent variables are reported.

Table 1. Means, Standard Deviation Values and Correlation Coefficients of Latent Variables

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>( \bar{x} )</th>
<th>df</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Psychological Capital</td>
<td>4.70</td>
<td>.60</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Structural Empowerment</td>
<td>3.50</td>
<td>.60</td>
<td>.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Psychological Empowerment</td>
<td>4.17</td>
<td>.54</td>
<td>.67</td>
<td>.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotional Exhaustion</td>
<td>2.39</td>
<td>.74</td>
<td>-.34</td>
<td>-2.27</td>
<td>-2.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Depersonalization</td>
<td>1.83</td>
<td>.69</td>
<td>-.35</td>
<td>-.18</td>
<td>-.30</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Personal Accomplishment (Reverse)</td>
<td>2.26</td>
<td>.56</td>
<td>-.59</td>
<td>-.34</td>
<td>-.54</td>
<td>.34</td>
<td>.33</td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

Table 1 shows us that there are negative and positive correlations between latent variables ranging from .18 to .67. The correlations between psychological capital and structural empowerment (r = .35), psychological capital and psychological empowerment (r = .67) are statistically significant, positive and medium-level. There are statistically significant, negative and medium-level relationships between psychological capital and emotional exhaustion (r = - .34), psychological capital and depersonalization (r = - .35), psychological capital and personal accomplishment-reverse (r = - .59). Structural empowerment, as one of the mediators of the model, has a statistically significant, negative and low-level relationship with emotional exhaustion (r = - .27) and depersonalization (r = - .18) while the mediator has a statistically significant, negative and medium-level relationship with personal accomplishment-reverse (r = - .34). Psychological empowerment, as the other mediator of the model, has statistically significant, negative and medium-level relationships with emotional exhaustion (r = - .28), depersonalization (r = - .30) and personal accomplishment-reverse (r = - .54).

Measurement Model

Before the structural model was tested in the research, a measurement model was tested together with the variables to be included in this structural model. According to the analysis, the \( \chi^2 \) value calculated for the measurement model is 1585.77 and the degree of freedom is 614 (\( \chi^2 / sd = 2.58, p < .00 \)). Other goodness of fit measures for the measurement model (GFI = .81; AGFI = .79; CFI = .95; IFI = .95; NFI = .92; NNFI = .95; SRMR = .073; RMSEA = .065) shows that the model is good. The t-test results for the model also show that all the factor loads of the variables are statistically significant.

Standardized coefficients range from .70 to .91 for optimism, resilience, hope, and self-efficacy, which are the observed variables of psychological capital. For meaning, competence, self-determination, and impact, which are the observed variables of psychological empowerment, standardized coefficients are between .50 and .86. For opportunity, information, support, resources, formal power, informal power and global empowerment, which are the observed variables of structural empowerment, standardized coefficients vary between .48 and .79. Standardized coefficients of the observed variables of emotional exhaustion range from .21, to .74. For the observed variables of depersonalization, standardized coefficients are between .42 and .70. Finally, error values of the observed variables of personal accomplishment-reverse range from .35 to .60.

Structural Model

The analysis of the structural model suggested in the study show that all of the coefficients amongst latent variables are statistically significant. Based on the significance of the coefficients, the model was tested with all the latent variables. The standardized coefficients of the tested model are presented in detail with the mediation analysis results (Figure 1).

The structural model was found have good fit values (\( \chi^2 / df (1718.86 / 621) = 2.77; GFI = .80; AGFI = .77; CFI = .95; IFI = .95; NFI = .92; NNFI = .94; SRMR = .09; RMSEA = .069 \)). The critical n for the model was found to be 165. Therefore, 374 teachers as the sample size of this study are considered sufficient enough to test the model.
Briefly, error values range from .19 to .49 for optimism, resilience, hope, and self-efficacy, which are the observed variables of psychological capital. For meaning, competence, self-determination, and impact, which are the observed variables of psychological empowerment, error values are between .31 and .74. For opportunity, information, support, resources, formal power, informal power and global empowerment, which are the observed variables of structural empowerment, error values vary between .37 and .78. Error values of the observed variables of emotional exhaustion range from .41, to .96. For the observed variables of depersonalization, error values are between .53 and .78. Finally, error values of the observed variables of personal accomplishment-reverse range from .61, to .88. There has been no need for any modification indices between any of the observed variables to improve the goodness of fit of the model.

Mediation Analysis

As stated in the data analysis section, two mediators model was used to test the mediation between latent variables. Then, direct, indirect and total effects between latent variables are also calculated based on the effect calculation method for models with two mediators (MacKinnon, 2008). First, analysis results on the mediation roles of psychological and structural empowerment in the relationship between psychological capital and teacher burnout are reported. Firstly, the direct effects of psychological capital on emotional exhaustion ($\beta = -.46, p < .01$), depersonalization ($\beta = -.49, p < .01$), and personal accomplishment-reverse ($\beta = -.74, p < .01$) are found to be statistically significant; accordingly, it is possible to say that the independent variable has some effects on the dependent variables. Secondly, the direct effects of psychological capital on psychological empowerment ($\beta = .80, p < .01$) and structural empowerment ($\beta = .42, p < .01$) are statistically significant. Therefore, it can be stated that the independent variable has some effects on both mediators in the model. Thirdly, the direct effects of psychological empowerment on emotional exhaustion ($\beta = -.50, p < .01$), depersonalization ($\beta = -.55, p < .01$) and personal accomplishment-reverse ($\beta = -.78, p < .01$) are determined as statistically significant. The direct effects of structural empowerment on emotional exhaustion ($\beta = -.49, p < .01$), depersonalization ($\beta = -.39, p < .01$) and personal accomplishment-reverse ($\beta = -.53, p < .01$) are statistically significant as well. Hence, it may be stated that mediators have some effects on the dependent variables without the independent variable. This analysis indicates that conduction of mediation analysis in the model is feasible. Therefore, the mediation roles of psychological and structural empowerment in the relationship between psychological capital and burnout (emotional exhaustion, depersonalization, and personal accomplishment-reverse) are tested in the model. Analysis results of the mediated effects in the model are presented in Figure 1 below.

![Diagram](image)

**Figure 1.** Mediation Role of Psychological and Structural Empowerment (*$p < .05$, **$p < .01$*)

***The path coefficients in parentheses indicate the direct effects before mediators are included in the model.
According to the Figure 1, the relationship between psychological capital and emotional exhaustion is statistically significant, negative and medium-level at first ($\beta = -0.46$, $p < .01$); but when the mediators are added into the model, the standardized path coefficient decreases radically and the path becomes statistically non-significant ($\beta = -0.07$, $p > .01$). In other words, psychological and structural empowerment has a full mediated effect on the relationship between psychological capital and emotional exhaustion. According to the fit indices of the model, the path has no significant contribution to the model’s goodness of fit values ($\chi^2 / df(179.06 / 620) = 2.77$; GFI = .80; AGFI = .77; CFI = .95; IFI = .95; NFI = .92; NNFI = .94; SRMR = .090; RMSEA = .069).

The relationship between psychological capital and depersonalization is found to be statistically significant, negative and medium-level before the mediators are included in the model ($\beta = -0.49$, $p < 0.01$). When psychological and structural empowerment are added to the analysis, the standardized path coefficient drops drastically and becomes statistically non-significant ($\beta = -0.01$, $p > 0.01$). This means that psychological and structural empowerment has a full mediated effect on the relationship between psychological capital and depersonalization. The added path has a very low contribution to the model’s goodness of fit values ($\chi^2 / df(1718.67 / 620) = 2.77$; GFI = .80; AGFI = .77; CFI = .95; IFI = .95; NFI = .92; NNFI = .94; SRMR = .090; RMSEA = .069).

Finally, the mediated effects of psychological and structural empowerment on the relationship between psychological capital and personal accomplishment-reverse are found to be moderate; accordingly, the mediators have a partial role in the model. Initially, the statistically significant relationship between psychological capital and personal accomplishment-reverse is high and negative ($\beta = -0.74$, $p < .01$); but when the mediators are added to the model, the path coefficient is still significant despite the moderate decline ($\beta = -0.34$, $p < .01$). The added path has a very low contribution to the model’s goodness of fit values ($\chi^2 / df(1695.45 / 620) = 2.73$; GFI = .80; AGFI = .78; CFI = .95; IFI = .95; NFI = .92; NNFI = .94; SRMR = .090; RMSEA = .068).

The results show us that psychological and structural empowerment has full mediated effects on the relationships between psychological capital and emotional exhaustion, psychological capital and depersonalization. The mediators have only partial mediated effects on the relationship between psychological capital and personal accomplishment-reverse. The analysis based on MacKinnon’s (2008) views about the calculation of effects’ values in the models with two mediators support the former analysis results. These analysis results are shown in Table 2.

### Table 2. Direct, Indirect and Total Effects Coefficients of the Latent Variables

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Direct Effects of Psychological Capital</th>
<th>Mediated Effects of Psychological Empowerment</th>
<th>Mediated Effects of Structural Empowerment</th>
<th>Total Mediated Effects</th>
<th>Total Effects***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>-0.07</td>
<td>-0.27**</td>
<td>-0.13**</td>
<td>-0.40**</td>
<td>-0.47</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>-0.01</td>
<td>-0.37**</td>
<td>-0.06**</td>
<td>-0.43**</td>
<td>-0.44</td>
</tr>
<tr>
<td>Personal Accomplishment-Reverse</td>
<td>-0.34**</td>
<td>-0.55**</td>
<td>-0.08**</td>
<td>-0.63**</td>
<td>-0.97</td>
</tr>
</tbody>
</table>

*All the values in the table are standardized beta coefficients ($\beta$).

**The significance level of all the values is $p < .01$.

***The significance levels of the total effects are not tested.

According to Table 2, psychological capital has a low direct effect on emotional exhaustion when the variables are in the model ($\beta = -0.07$, $p > 0.01$). However, the total mediated effects ($\beta = -0.39$, $p < .01$) have a significant contribution to the total effects on emotional exhaustion ($\beta = -0.46$). This contribution shows that psychological and structural empowerment has full mediator roles in the relationship between psychological capital and emotional exhaustion. The indirect effects level might be interpreted as moderate. Psychological capital has a very low direct effect on depersonalization when
the variables are in the model ($\beta = -.01, p > .01$). Though, the total mediated effects ($\beta = -.43, p < .01$) have a major contribution to the total effects on depersonalization ($\beta = -.44$). Therefore, psychological and structural empowerment has full mediator roles in the relationship between psychological capital and depersonalization. The indirect effects level is considered high. Finally, Psychological capital has a moderate direct effect on personal accomplishment-reverse when the variables are in the model ($\beta = -.34, p < .01$). The total mediated effects ($\beta = -.63, p < .01$) are nearly multiplied and the total effects on personal accomplishment-reverse is quite high ($\beta = -.97$). Psychological and structural empowerment has partial mediator roles in the relationship between psychological capital and emotional exhaustion because the psychological capital still has direct effects on personal accomplishment-reverse. The decline in the direct effects of psychological capital on personal accomplishment-reverse is interpreted as a partial mediator role in the model. The indirect effects level might be seen moderate.

Discussion, Conclusion and Suggestions

This study was conducted to determine the mediation effects of psychological and structural empowerment on the relationship between psychological capital and teacher burnout. According to the results of the study, psychological and structural empowerment has full mediator roles in the relationship between psychological capital and emotional exhaustion, psychological capital and depersonalization. Besides, the mediators have partial mediator roles in the relationship between psychological capital and personal accomplishment-reverse. These results indicate that psychological and structural empowerment can play an important role in diminishing teacher burnout.

The direct relationships between psychological capital and emotional exhaustion provide a basis for the results of the study. According to a study on a group of public employees by Çetin et al. (2013), the aspects of psychological capital have very significant roles in explaining the aspects of burnout; especially, resilience and hope explain more of emotional exhaustion. Self-efficacy and optimism have statistically significant and negative effects on emotional exhaustion. Although it is not directly related to the results of this study, views of Luthans et al. (2007) on psychological capital will help us understand the links between psychological capital and burnout. According to the authors, positive psychological capital has significant effects on job performance and job satisfaction. To diminish burnout in organizations, it is important to see effects of positive psychological capital. Peng et al. (2013) state organizational commitment as a mediator in the relationship between psychological capital and burnout. Therefore, focusing on positive features of an organization like commitment, psychological capital may diminish experiencing burnout in organizations. This helps us understand the importance of psychological capital on diminishing burnout. Grayson and Alvarez (2008) suggest that a healthy school climate decreases the possibility of teacher burnout. This idea indirectly supports the psychological capital theory for teachers.

In the literature, psychological and structural empowerment as the mediators in this study is stated to have negative correlations with emotional exhaustion. For example, Gilbert et al. (2010) show that structural empowerment is the predictor of emotional exhaustion. Polatç and Özçalıık (2013) suggest that structural empowerment has diminishing effects on burnout. In addition to this, when psychological empowerment levels of teachers improve their levels of burnout decrease. The study of Laschinger et al. (2003) provides similar relationships between the mentioned variables. According to the results of our study, psychological capital completely needs psychological and structural empowerment when affecting emotional exhaustion. The model suggested in our study shows that the correlations amongst psychological capital, psychological and structural empowerment and burnout go way beyond what is found in the literature. Here, the results of mediation analysis may help us understand the correlations clearly.

According to the results of the research, the teachers experienced emotional exhaustion, followed by personal failure and desensitization respectively. Teachers experience emotional exhaustion more when compared to the two other aspects of burnout (Altinkurt et al., 2015; Cemaloğlu & Erdemoğlu Şahin, 2007; Yılmaz et al., 2015; Yılmaz, 2014). Teaching and learning processes require
understanding emotionally. Based on this idea, teaching as an emotionally intense profession increases the possibility of emotional exhaustion (Chang, 2009). Therefore, increasing psychological capital of teachers with the help of psychological and structural empowerment should be seen as an important factor of diminishing the occurrence of teacher burnout. The model suggested in the study represents that the effect of psychological capital on emotional exhaustion is provided by psychological and structural empowerment. In other words, the effect of psychological capital on emotional exhaustion depends on the existence of psychological and structural empowerment in the model. In mediation analysis, the main goal is to determine the complete or partial effects of mediators that must or should be in a model (Şimşek, 2007). As a result, psychological and structural empowerment is quite important in the relationship between psychological capital and emotional exhaustion.

In this study, negative correlations between psychological capital and depersonalization and between empowerment (psychological and structural) and depersonalization are found. To understand the correlations more clearly, direct correlations between psychological capital and depersonalization stated in the literature should be examined. According to Skaalvik and Skaalvik (2010), there is a strong relationship between depersonalization and teacher self-efficacy. Their model suggests statistically significant and negative correlations between mentioned variables. Moreover, Brouwers and Tomic (2000) suggest that perceived self-efficacy has a longitudinal effect on depersonalization. A decrease of self-efficacy perception triggers depersonalization of teachers at their professions. According to Çetin et al. (2013), hope and self-efficacy significantly affect depersonalization while resilience and hope have little effects on depersonalization. Psychological capital and depersonalization have significant correlations in the literature. This reveals the significance of psychological capital in preventing depersonalization of teachers.

The authors of this study couldn’t reach sufficient studies that show the correlations between empowerment (psychological and structural) and depersonalization in the literature. So, it might be useful to discuss the correlations indirectly with notions and studies conducted on different samples. According to our model, psychological empowerment has more effect on depersonalization than structural empowerment. There are some studies that show negative correlations between depersonalization and job satisfaction (Carless, 2004; Çalışkan & Hazır, 2012; Laschinger et al., 2001; Tolay, Sürgevil, & Topoyan, 2012). It is also possible to find studies showing negative correlations between depersonalization and burnout (Grayson & Alvarez, 2008; Kinman, Wray, & Strange, 2011; Skaalvik & Skaalvik, 2009, 2010; Zhang & Zhu, 2008). These negative correlations help us to explain the negative correlations between psychological empowerment and depersonalization. If employees are not satisfied with their profession, they might experience depersonalization. To avoid that psychological and structural empowerment should be provided in an organization. It is highly expected that higher levels of empowerment will decrease the possibility of depersonalization.

In this study, full mediator roles of psychological and structural empowerment were determined in the relationship between psychological capital and depersonalization. As to the model, psychological capital affects diminishing depersonalization, and this effect gets stronger with the help of psychological and structural empowerment, revealing the importance of psychological capital with empowerment for teachers. According to Dorman (2003), depersonalization is directly related to self-esteem and role conflict. Depersonalization of teachers increases as role conflict arises, but it decreases with the high self-esteem of teachers. Enhancing psychological capital, psychological and structural empowerment of teachers might have an impact on averting depersonalization.

As to the results of mediation analysis, psychological and structural empowerment has partial mediator roles in the relationship between psychological capital and feeling of personal failure. According to the model, the mediated effects of psychological empowerment on teachers’ feeling of personal failure is high while the mediated effects of structural empowerment on teachers’ feeling of personal failure are low. There are some studies that show the correlations between teachers’ psychological capital and feeling of personal failure. Altunkurt et al. (2015) suggest that resilience, hope, and self-efficacy as some of the aspects of psychological capital are the predictors of teachers’ feeling of
personal failure. Çetin et al. (2013) suggest that only two factors, which are hope and self-efficacy, explain public employees’ feeling of personal failure. These two factors have low effects on predicting public employees’ feeling of personal failure. Some studies explain the correlations between psychological capital and personal failure. As Akçay (2012) states, public employees’ psychological capital and job satisfaction levels have statistically significant and negative relationships. It is possible to infer that psychological capital increases job satisfaction and this may prevent the feeling of personal failure indirectly. According to Skaalvik and Skaalvik (2009), when job satisfaction levels of teachers improve, their feelings of personal failure decrease. According to Dorman (2003), teacher efficacy and self-esteem predict personal accomplishment and this relationship helps us to understand the partial mediator roles in the model. Psychological capital and feeling of personal failure are like opposite notions in the literature. In accordance with the results of the model, it is believed that psychological capital plays an important role in decreasing the feeling of personal failure; thus, improving personal accomplishment.

The mediator roles of psychological and structural empowerment in the relationship between psychological capital and burnout and the negative correlations amongst variables have enlightening effects for efforts to prevent or reduce teacher burnout. Therefore, supporting teachers with incentives in their working environment, organizing an encouraging structure of a school and keeping the psychological health of teachers strong are very important to prevent teacher burnout. Results of this study may provide a basis for further thorough analyses. This will ensure that statistically significant relationships will be interpreted in detail with research techniques like observation, interview and all the variables in this study can be well understood.
References


