Abstract:
This research was carried out to make an inference about school managers’ power sources, school culture, and psychological climate, which are thought to affect psychological empowerment will be emphasized. This study was designed and conducted according to the correlation research pattern to test the proposed conceptual model; and, this model has been tested with the Structural Equation Model (SEM). 358 teachers (252 women and 97 men) participated in the study. Then to evaluate the model $\chi^2$ (Chi-square), $\chi^2$/df ratio (Chi-square/degree of freedom), SRMR (Standardized root mean square residual), GFI (Goodness-of-fit index), AGFI (Adjusted goodness-of-fit index), NFI (Normed Fit Index), TLI (Turker-Lewis Index), CFI (Comparative Fit Index) and RMSEA (Root mean square error of approximation) are examined. According to the results, some hypotheses have been accepted but some of them not. H1 -School principal’s power sources affect psychological empowerment- and H2 -Power sources affect the psychological climate- have been rejected. However H3 -School culture has an impact on its psychological climate-, H4 -Power sources affect school culture-, H5 -Psychological climate affects psychological empowerment- and H6 -School culture affects psychological empowerment- has been accepted.

Keywords: Psychological empowerment, school culture, psychological climate, power sources
INTRODUCTION

Psychological empowerment is very important for both employees and managers. Employees realize their potential thanks to psychological empowerment and increase their effectiveness. Managers, together with their employees whose psychological well-being is at the highest level, achieve the targeted objectives of the organization. There are many studies that reveal that psychological empowerment has positive consequences for the benefit of the organization. Researches suggest that, thanks to psychological empowerment, employees are more committed to their institutions (Avolio, Zhu, Koh, and Bhatia, 2004; Liden, Wayne, and Sparrowe, 2000) and more productive (Martin and Bush, 2006). However, it is seen in the literature that studies to determine the preliminary variables affecting psychological empowerment have not been done much. In this study, school managers' power sources, school culture, and psychological climate, which are thought to affect psychological empowerment will be emphasized.

Russell (1938) stated that one of the most basic concepts in social sciences is “power”. Although leaders' attitudes differ from each other, the power distance is very wide in some societies. Turkey and the Far East countries' workers want their managers to appear strong, and they expect the task to have been dictated to them. French and Raven (1959) mention on five sources of power; reward power, coercive power, legitimate power, charismatic power, expert power (Lee and Low, 2009, p. 62).

Reward power is that individuals who will want rewards comply with the wishes of the manager. The coercive power is related to the situation of punishment when managers' orders and requests are not followed or undesirable behavior is displayed. Legitimate power is the ability of the manager to make certain requests and influence them thanks to his position. Charismatic power is the power to identify with their subordinates by influencing them, In expert power, managers are accepted thanks to their superior knowledge and skills (Lee and Low, 2009, p. 64).

Expert, charismatic, informational and loyalty power sources are included in the soft power group. Soft power sources emerge in administrative environments where task-oriented and personal qualities are dominant, and the use of a gentle and friendly language in a manner that will create sympathy in the subordinates is in the foreground. Reward power is included in the coercive power type and mutual power type harsh power sources group. Harsh power sources are mostly seen on authority and in top-down communication environments, and threatening language is used to ensure the harmony of subordinates (Aslanargun, 2009).

School culture is displays habits, traditions and formalities and is often referred to as organizational culture positioned in the educational background (Schoen & Teddlie, 2008). Also, it shapes teacher-student interacts as well as interacts among teachers (Powers, 2009). While the power sources used by administrators affect school culture, school culture affects the power sources used by administrators too. Therefore, school managers must first understand the school’s culture and then manage it. Culture is complex which has a very unique and idiosyncratic way of working. When an organization has a clear culture will ensure that things work well. Successful school principals know the important role that organizational culture plays in developing a successful school (Mac Neil, Prater and Busch, 2009). According to Balcı (1993), for school success, first of all, a culture should that values academic success, has high-performance expectations and prioritizes the establishment of collaborative relationships.

In this research, four sources of school cultures will be mentioned. These are support-oriented culture, success-oriented culture, task-oriented culture, and bureaucratic culture. The culture of support-oriented is based on human relationships and trust. There are mutual relationships and commitment among the members of the organization (Kilian 1999; Phyeysy, 1993; Saphier and King, 1985). Success-Oriented Culture: The realization of the goals comes to the forefront than the rules. It is important to take individual responsibility. Organizations
support and care for individual success (Pheysey 1993; Cooke and Szumal, 1993). Task-Oriented Culture: Organizational goals are ahead of individual goals. These types of organizations are business-centered organizations (Handy, 1981; Harrison, 1972). Bureaucratic Culture: It is a rational and centralized structure with strict rules and regulations, specialization and hierarchical authority is important (Can, Aşan and Aydin, 2006).

Information about the work of the employees in the organization and competence until today, psychological and social competence and capacity gained importance. In this context, organizations face more and more psychological empowerment concept day by day. Psychological empowerment can be defined as an active motivational orientation with regard to the individual's work role and an individual's feeling of being in control at work (Boudrias, Morin and Lajoie, 2014).

Psychological empowerment is dimensioned by Thomas and Velthouse (1990) in the form of competence, significance, choice, and influence. However, Spreitzer (1995) later revealed dimensions in terms of meaning, adequacy, autonomy, and influence, and a measurement tool related to these dimensions was developed. Meaning is the sense of understanding that the work or purpose of the employees is important according to their standards and values. Competence is the belief in the competence of employees to perform their duties skillfully (Spreitzer, 1995; Thomas and Velthouse, 1990).

Autonomy is the freedom to choose to perform their duties as they wish, employees perceive that they are autonomous in the process of starting and finishing work (Bell and Staw, 1980; Deci, Connel and Ryan, 1989; Zhang, Song, Tsui and Fu, 2014) and influence is related to the feeling that it has any effect on organizational results (Ashforth, 1989; Kirkman & Rosen, 1999; Spreitzer, 1995). Psychological empowerment plays an important role in job satisfaction and organizational citizenship behavior (Wang, 2015).

Another concept related to psychological empowerment is the psychological climate. Organizational climate and psychological climate are concepts that are often confused with each other. They proposed that psychological climate was an individual attribute, whereas organizational climate was a situational attribute of the organization (James and Jones, 1974).

The psychological climate is how the organization is perceived by its own employees (Barkhi and Kao, 2011, James and James 1989) and more individual assessment of conditions (Barkhi and Kao, 2011; Day and Bedeian, 1991; Zohar and Luria, 2004). In other words, the psychological climate is the personal and acquired cognitive descriptions that individuals place on their work environments (James and Sells, 1981). Schyns, Veldhoven and Wood (2009) suggest that psychological climate is a stronger variable than the organizational climate in predicting individual outcomes.

Researchers have made different classifications regarding the dimensions of the psychological climate. According to Koys and DeCotiis (1991) autonomy, trust, integrity, oppression, support, affirmation, justice, and innovation; Brown and Leigh (1996) management support, role clarity, perceived contribution and approval, self-expression and professional difficulty; O’Neill and Arendt (2008) trust, autonomy, self-expression, organizational structure, and pressure; Amenumey and Lockwood (2008) facilitating work, customer orientation, feedback on performance, role clarity, internal service, managerial practices, and communication; Manning (2010) executive support and facilitation, job standards and in-service training, organizational rules-pressure, cooperation between the working group, spirit and friendship, conflict, and standards and goals.

**Effects of Power Sources on Psychological Empowerment**

Researches show that the power sources used by managers affect the attitudes, behaviors, and responses of the employees, thus organizational efficiency and performance (Atmaca, 2014; Altinkurt and Yılmaz, 2014; Özcan, Çağlar, Karataş and Polat, 2014; Yılmaz and Altinkurt, 2012), that reward power used by managers is the type of power that affects organizational culture the most (Koşar, 2008); legitimate power and charisma power have a
positive effect on emotional commitment (Erkutlu and Chafra, 2013), and the sources of organizational power applied by school principals have a significant effect on teachers' organizational commitment levels (Akgül, 2013; Cömert, 2014; Jahangir, Akbar and Begum, 2006; Rahim and Afza, 1993).

Also, Toytok and Uçar (2018) stated that employees' perceptions of depression decreased when they used soft power sources. When managers show positive attitudes and behaviors towards their employees, employees will also have positive attitudes towards their managers and organizations (Rhoades, Eisenberger and Armeli, 2001). It can be said that when school administrators use charismatic, expertise, informational and loyalty power sources, teachers will feel stronger in the school environment and this situation may have a positive effect on their performance.

Social Exchange Theory (Blau, 1964) talks about the relationship between psychological empowerment and manager's power sources. According to the theory, interpersonal relations are mutually interdependent, not only economically but also the whole interactions that produce psychological and social obligations (Karagonlar, Öztürk and Özmen, 2015). There are many studies in the literature explaining the relationship between managers and employees with the theory of social exchange (Ateş, 2017; Cropanzano and Mitchell, 2005; Yıldız and Yıldız, 2015). Based on all these results, it is foreseen that power sources of managers will have an effect on psychological empowerment.

H₁: School principal's power sources affect psychological empowerment.

Effects of Power Sources on Psychological Climate

Çalışkur (2015) has worked on the concept of power and organizational psychology. As a result of the research, it is stated that managers and employees have affected by the perceived social power within the organization. Akdemir (2017), has shown that there is a positive relationship between managerial power sources (charismatic power, legitimate power, reward power and expert power) and organizational structure that forms the organizational climate dimensions, individual responsibility, reward, risk-taking.

When the literature is examined, it is seen that there are very few studies on the relationship between power sources and psychological climate. On the other hand, there are studies on power sources and organizational climate. While organizational climate refers to employees' collective perception of the work environment, psychological climate refers to individual evaluations (Joyce & Scolum 1982). Therefore, psychological climate and power sources are thought to be related to the results of research on power sources and organizational climate.

H₂: Power sources affect the psychological climate

The effect of school culture on psychological climate

Different researchers found that there is a low, positive and significant relationship between the perceptions of classroom teachers and their school culture perceptions (Glıgorovic and Buha, 2016; Kadioğlu Ateş and Vatansever Bayraktar, 2018). Also, there is a moderate and significant relationship between their perceptions of school culture and their motivations. (Arpaguş 2011; Yılmaz 2009).

The psychological climate has been associated with various organizational behaviors. These: information sharing (Kettinger, Li, Davis and Kettinger, 2015), commitment to work (Altunkese, 2002; Brown and Leigh, 1996; Kahn, 1990), decision-making performance (Barkhi and Kao, 2011), organizational citizenship behavior (Altunkese, 2002; Ghanbari, Siroos and Eskandari, Asghar, 2014; Wei, Yu-Chen, Han, Tzu-Shian and Hsu, I-Chieh, 2010) business integration and job satisfaction (Biswas, 2010), organizational commitment (Thayer, 2008), psychological empowerment (Amenumey and Lockwood, 2008), adaptation to change (Martin, Jones and Callan, 2005), conflict management strategies (Strutton, Pelton and Lumpkin, 1993), job
performance (Brown and Leigh, 1996; Biswas and Varma, 2007), business orientation (Day and Bedeian, 1991) and motivation (James, Hartman, Stebbins and Jones, 1977).

Rice and Steele (2004) found that there is a significant relationship between individuals’ psychological well-being and culture. They stated that the group with the highest relationship was Scandinavian people. From this point of view, it is predicted that individuals are affected and can affect too, by the community they work in, as well as mutually.

H3 School culture has an impact on the psychological climate.

The effect of power sources used by administrators on school culture

Differences between school climate and culture are highlighted in organizational studies. Often the climate is viewed as behaviour, while culture is seen as comprising the values and norms of the school or organization (Hoy, 1990; Heck and Marcoulides 1996). Lunenburg and Ornstein (2004) described organizational climate as the total environmental quality within an organization and believe that the recent attention to the effectiveness of public schools and their cultures has shed more interest on the importance of climate. The relationship between culture and climate was supported by Schein (1985, 1996) when he stated that norms, values, rituals and climate are all manifestations of culture. In addition, the relationship of culture and climate is further supported by McDougall and Beattie (1998), as well as by the early studies of Schneider and Reichers (1983).

Findings obtained from the researches show that organizational climate is positively and moderately correlated with all dimensions of instructional leadership (Ayık and Şayir 2014). Transformational leadership has an impact on school climate's commitment, resource adequacy, professional interest and innovation dimensions, and interactive leadership's participatory decision-making dimension. Also, it has been found that it has an impact on the leadership behavior of school principals (Tajasom and Ahmad, 2011) and the school climate (Şentürk and Sağnak 2012). Lastly, the reward power used by school administrators is the type of power that most affects the organizational culture (Koşar, 2008).

Differences between school climate and culture often mentioned in organizational studies. The climate is viewed as behaviour but culture is seen as comprising the values and norms of the school or organization (Hoy 1990; Heck and Marcoulides 1996). McDougall ve Beattie (1998), Schneider and Reichers (1983) stated that there is a relationship between organizational climate and organizational culture. Also, a study on elementary schools showed that principals could indirectly affect school effectiveness by influencing the school’s culture (Hallinger, Bickman and Davis, 1996). Based on these studies, it has been predicted that the power sources used by the leaders may affect the school culture.

H4 Power sources affect school culture.

The effect of psychological climate on psychological empowerment.

In their research on academic staff working in public hospitals, Gül and Çöl (2004) found that empowered employees showed emotional and normative commitment to their organizations. Mutual trust has an important place in psychological empowerment. Employees who are trusted by the work community will feel a sense of safety and acceptance. In this way, they focus more on their duties (Doğan, 2006). Because, strengthening can be positively and negatively affected by environmental factors (Ghani and Hussin, 2009). Thomas and Velthouse (1990) stated that psychological empowerment can be increased by changing the psychological climate. Therefore, it is predicted that the psychological climate may affect psychological empowerment.

H5 Psychological climate affects psychological empowerment.

The effect of school culture on psychological empowerment

Psychological empowerment positively affects work performance (Chen, 2011; Kanbur, 2018); organizational commitment (Bogler and Someck, 2004; Çekmecioğlu and Eren, 2007) and
job satisfaction (Tolay, Sürgevil and Topoyan, 2012). It improves internal and external motivation (İhtiyaroğlu, 2017) and reduces burnout (Polatçı and Özçalık, 2013).

Spreitzer (1995) argues that empowered employees see themselves as competent and able to influence their jobs and work environments in meaningful ways. Get Liden et. (2000) stated that employees who find their job meaningful and who have high motivation affect their work environment and they are affected by their work environment. Based on all these research results, it is thought that employees who strengthen their performance with psychological empowerment may have an impact on creating a strong school culture.

H6 School culture affects psychological empowerment.

Based on the hypotheses put forward theoretically, it was produced the conceptual model given in Figure 1.

According to the conceptual model given in Figure 1;

- Power sources affect school culture, psychological climate and psychological empowerment.
- School culture affects psychological empowerment.
- School culture affects the psychological climate.
- The psychological climate affects psychological empowerment.

Also;

- Power sources and school culture together affect the psychological climate,
- Power sources and psychological climate together affect psychological empowerment,
- School culture and psychological climate together affect psychological empowerment,
- Power sources school culture, and psychological climate together affect psychological empowerment.

METHOD

Research Model

This study was designed and conducted according to the correlation research pattern to test the conceptual model proposed in Figure 1. The correlation research pattern has two purposes. The first describes the degree and direction of the relationship between two or more variables. The second purpose is to estimate the change of the independent variable on the dependent variable if there is a sufficiently large relationship between the two variables (Fraenkel & Wallen, 2006). Creswell (2017) defines this research pattern as a predictive screening pattern. According to Creswell, the predictive research pattern is the research pattern made to “predict future behavior and determine the variables that will predict the outcome”. In this study, a conceptual model was proposed to explain the relationships between dependent and independent variables, and this model, which was collected by data, was tested in the Structural Equation Model (SEM-SEM). The structural equation model tests the suitability of the data obtained by the researcher with the conceptual theoretical model (Özgenel, 2018).
Sample data collection

The study data were collected in 2020 by teachers working in various public schools in the Anatolian side of Istanbul, using the method of “easy sampling”. Before the study, the purpose of the research was explained, the approval of the participants was obtained, and the privacy of the participants was protected. In the research, 500 scale forms were distributed, 381 scales were returned, 32 scale forms were not included in the analysis because they were missing, incorrect, or empty.

72.2% (252) of the teachers participating in the study are women and 27.8% (97) are men. While the majority of the participant teachers are between the ages of 31-40 (49.9%), the average seniority is in the range of 11-15 years (34.1%). 87% of the teachers are undergraduate graduates and 12.9% are graduate graduates. 26.1% (91) of the teachers work in primary school, 46.4% (162) secondary school, and 27.5% (96) work in high school.

Measures

In the research, 4 different scales were used together with the Information Form. All the scales were developed or adapted for educators.

Psychological Climate Scale (PCS) was developed by Brown and Leigh (1996) and adapted to Turkish by Argon and Limon (2017). The original form of the scale has six sub-dimensions and 21 items. The original scale is in a 7-point Likert style. However, while the scale was adapted to Turkish, it was used as a 5-point Likert. The scale options are from “Strongly Disagree-1” to “Strongly Agree-5” In the adaptation study, the items belonging to the sub-dimensions of “Organizational Contribution” and “Organizational Approval”, which are two different factors in the original scale, were collected under one factor. The vocational difficulty factor did not meet the reliability criteria and removed from the scale. In the adaptation study, the scale was found to consist of 4 factors and 19 items. The item distribution in the scale is “Supportive Management (1-6 items), Organizational Contribution and Approval (7-12 items), Self-Expression (13-16 items), Role Significance (17-19 items)”. Total scores are obtained by summing up all the items from the scale. Adaptation studies to Turkish were carried out on teachers. (Argon & Limon 2017)

School Culture Scale (SCS) was developed by Terzi (2005). Terzi determined 4 cultural dimensions with a scale of 29 items in schools. These cultural dimensions are Support-oriented culture (7, 10, 11, 16, 18, 24, 26, 27), Success-oriented culture (9, 17, 21, 22, 25, 28), Bureaucratic Culture (8, 12, 13, 14, 15, 19, 20, 3, 29), Task-oriented Culture (1, 2, 3, 4, 5, 6). School Culture Scale is rated as 5-point Likert (1-Never 2-Rarely 3-Sometimes 4-Mostly 5-Always). Ölçekte toplam puan elde edilmemektedir. Total score is not obtained from the scale. Instead, each cultural dimension item is collected and a total score or arithmetic average is obtained. There are no inverse items on the scale.

Power Sources Scale (PSS) was developed by Aslanargun (2009). The scale consists of 30 items and 7 dimensions. The Power Sources Scale has two basic dimensions (soft and harsh). In the scale, reward (1-5 items), coercive (6-10 items) and response (11-16 items) power sources; sources of expertise (17-21 items), informational (22-24 items), loyalty (25-28 items) and charismatic (28-30 items) are classified as soft power sources. The scale was scored as “Always (5), Mostly (4), Sometimes (3), Rarely (2) and Never (1)”. Scale sub-dimensions can be summed as well as soft and harsh power sources can be obtained as total points. There are no inverse items in the scale.

Psychological Empowerment Scale; 4-dimensional and 12-item (Meaning 1-3, proficiency 4-6, autonomy 7-9, and effect 10-12) measurement tool were developed by Spreitzer (1995). Survegile, Tolay, and Topoyan (2013) adapted to Turkish. There are three expressions in each dimension. While the sub-dimensions of the scale are evaluated within themselves, results can be obtained for each dimension, and the total psychological empowerment score is obtained by adding all dimensions. The psychological empowerment scale was rated with a 5-point Likert Scale. Accordingly, participants were asked to indicate their level of participation in statements
about psychological empowerment by marking one of the options: "1-Strongly disagree, 2-Disagree, 3-Neither agree or disagree, 4-Agree, 5-Strongly agree". The specified high values; indicates a high perception of psychological empowerment. There are no inverse items in the scale.

**Data analysis**

To measure the reliability of the scales used in the study, Cronbach Alpha; coefficient, kurtosis and skewness values were calculated for the normality assumption. Percentage and frequency tests were used to describe the data of the personal characteristics of the participants. Scoring of the statements in the scale; never between 1-1.79; rarely between 1.80-2.59; sometimes between 2.60-3.39; mostly between 3.40-4.19 and always 4.20-5.00.

Structural Equation Model (SEM) was used to test the conformity of the conceptual model to the data and to examine the relationships between the variables. In order to evaluate the model, first of all, correlation coefficients between variables were examined, whether the road coefficients were significant was checked, and related and not significant road coefficients were removed from the model. Then to evaluate the model χ² (Chi-square), χ²/df ratio (Chi-square/degree of freedom), SRMR (Standardized root mean square residual), GFI (Goodness-of-fit index), AGFI (Adjusted goodness-of-fit index), NFI (Normed Fit Index), TLI (Turker-Lewis Index), CFI (Comparative Fit Index) and RMSEA (Root mean square error of approximation) are examined.

### Table 1. The kurtosis, skewness and reliability values of the scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach Alpha α</th>
</tr>
</thead>
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<tr>
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<td>349</td>
<td>-.756</td>
<td>1.490</td>
<td>.891</td>
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<tr>
<td>Harsh power Sources (HPS)</td>
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<td>.672</td>
<td>.804</td>
<td>.785</td>
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<tr>
<td>Soft power Sources (SPS)</td>
<td>349</td>
<td>-.073</td>
<td>-.992</td>
<td>.965</td>
</tr>
<tr>
<td>Psychological Climate (PC)</td>
<td>349</td>
<td>-.052</td>
<td>.626</td>
<td>.855</td>
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<tr>
<td>Support-Oriented Culture(SUPOC)</td>
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<td>-.420</td>
<td>1.301</td>
<td>.861</td>
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<tr>
<td>Success-Oriented Culture(SUCOC)</td>
<td>349</td>
<td>-.279</td>
<td>.461</td>
<td>.825</td>
</tr>
<tr>
<td>Bureauctatic Culture (BUC)</td>
<td>349</td>
<td>-.026</td>
<td>.700</td>
<td>.784</td>
</tr>
<tr>
<td>Task-Oriented Culture (TOC)</td>
<td>349</td>
<td>-.465</td>
<td>.700</td>
<td>.773</td>
</tr>
</tbody>
</table>

As can be seen in Table 1, it is seen that the kurtosis and skewness values are between -1.5 and +1.5, and the reliability coefficients are above .70. Considering these values, it can be said that the data are suitable for the SEM analysis designed for the purpose of the research.

The conceptual model has been evaluated according to the criteria suggested in the fit indices given in Table 2 (Barret, 2007; Bentler and Bonett 1980; Byrne, Shavelson and Muthen, 1989; Hu and Bentler, 1999; Jöreskog, 2004; Kline, 2011; Maydeu-Olives and Garca’-Forero, 2010; Schermelleh-Engel, Moosbrugger and Müller, 2003; Schumacker and Lomax, 2010).

### Table 2.

**Model evaluation fit indices and criteria**

<table>
<thead>
<tr>
<th>Index</th>
<th>Perfect Fit</th>
<th>Acceptable Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>χ²/df ratio</td>
<td>0≤χ²/df ≤2-3</td>
<td>3&lt;χ²/df ≤5</td>
</tr>
<tr>
<td>GFI</td>
<td>.95 ≤GFI ≤1.0</td>
<td>.90 ≤ GFI &lt;.95</td>
</tr>
<tr>
<td>AGFI</td>
<td>.90 ≤AGFI ≤1.0</td>
<td>.85 ≤ AGFI&lt;.90</td>
</tr>
<tr>
<td>NFI</td>
<td>.95 ≤ NFI ≤1.0</td>
<td>.90 ≤NFI&lt;.95</td>
</tr>
<tr>
<td>TLI</td>
<td>.95 ≤ TLI ≤1.0</td>
<td>.90 ≤TLI&lt;.95</td>
</tr>
<tr>
<td>CFI</td>
<td>.95 ≤ CFI ≤1.0</td>
<td>.90 ≤CFI&lt;.95</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0≤RMSEA ≤.05</td>
<td>.05 &lt; RMSEA&lt;.08</td>
</tr>
<tr>
<td>SRMR</td>
<td>0≤SRMR≤.05</td>
<td>.05 &lt; SRMR ≤.08</td>
</tr>
</tbody>
</table>
RESULTS

Correlation analysis was carried out to determine the pattern of relations between the variables in the study.

As it can be seen in Table 3, there is a negative and low level significant relationship between psychological empowerment and harsh power sources (r = .129; p < .01). Also, there is a positive significant relationship between psychological empowerment with soft power sources (r = .202; p < .01), psychological climate (r = .478; p < .01), support-oriented culture (r = .403; p < .01), success-oriented culture (r = .420; p < .01) and task-oriented culture (r = .385; p < .01). However, there is no significant relationship between psychological empowerment and bureaucratic culture (r = -.035; p > .05).

There is a positive relationship between harsh power sources and soft power sources (r = -.516; p < .01), and psychological climate (r = .117; p < .05). Likewise, there is a positive relationship between support-oriented culture (r = .133; p < .05), success-oriented culture (r = .115; p < .05), bureaucratic culture (r = .120; p < .05). However, it is observed that there is a negative relationship between task-oriented culture (r = .142; p < .01).

Table 3. Correlation analysis results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td>2-Harsh Power Sources (HPS)</td>
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<td>2.844</td>
<td>.355</td>
<td>-.129</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3-Soft power Sources (SPS)</td>
<td>349</td>
<td>3.313</td>
<td>.968</td>
<td>.202</td>
<td>-.516</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>4-Psychological Climate (PC)</td>
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<td>3.779</td>
<td>.417</td>
<td>.478</td>
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<td>.279</td>
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<td>5-Support-Oriented Culture (SUPOC)</td>
<td>349</td>
<td>3.847</td>
<td>.593</td>
<td>.403</td>
<td>-.133</td>
<td>.365</td>
<td>.665</td>
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<tr>
<td>6-Success-Oriented Culture (SUCOC)</td>
<td>349</td>
<td>3.879</td>
<td>.610</td>
<td>.420</td>
<td>-.115</td>
<td>.346</td>
<td>.686</td>
<td>.814</td>
<td>1</td>
<td></td>
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<tr>
<td>7-Bureactatic Culture (BUC)</td>
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<td>3.200</td>
<td>.597</td>
<td>-.035</td>
<td>.120</td>
<td>-.179</td>
<td>.039</td>
<td>-.043</td>
<td>.022</td>
<td>1</td>
<td></td>
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<tr>
<td>8-Task-Oriented Culture (TOC)</td>
<td>349</td>
<td>4.129</td>
<td>.521</td>
<td>.385</td>
<td>-.142</td>
<td>.318</td>
<td>.561</td>
<td>.579</td>
<td>.628</td>
<td>.154</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

There is a positive relationship between soft power sources and psychological climate (r = .279; p < .01). Likewise, there is a positive relationship between support culture (r = .365; p < .01), success culture (r = .346; p < .01) and task culture (r = .318; p < .01). However, it is observed that there is a negative relationship with bureaucratic culture (r = -.179; p < .01).

After determining the relationships between the variables, the conceptual model was tested with the collected data. First, the conceptual model was added sequentially and analyzed gradually.
HPS: Harsh Power Sources; SPS: Soft Power Sources; PE: Psychological Empowerment

HPS: Harsh Power Sources; SPS: Soft Power Sources; PC: Psychological Climate

HPS: Harsh Power Sources; SPS: Soft Power Sources; SUPOC: Support-Oriented Culture; SUCOC: Success-Oriented Culture; BUC: Burectatic Culture; TOC: Task-Oriented Culture

SUPOC: Support-Oriented Culture; SUCOC: Success-Oriented Culture; BUC: Burectatic Culture; TOC: Task-Oriented Culture; PE: Psychological Empowerment

PC: Psychological Climate; PE: Psychological Empowerment

Figure 2. Relationships between variables in the conceptual model
The fit indexes of the conceptual model given in Figure 2 are given in Table 4.

**Table 4. Conceptual model fit indexes**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$</th>
<th>$\chi^2$/df</th>
<th>SRMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>.174</td>
<td>1</td>
<td>.676</td>
<td>.174</td>
<td>1.000</td>
<td>.995</td>
<td>1.000</td>
<td>1.021</td>
<td>1.000</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Achieved value: Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit, Perfect Fit

$\chi^2$=Chi-square; df=degree of freedom; $p<.05$; SRMR= Standardized root mean square residual; GFI= Goodness-of-fit index; AGFI=Adjusted goodness-of-fit index; NFI=Normed Fit Index; TLI=Turker-Lewis Index; CFI=Comparative Fit Index; RMSEA= Root mean square error of approximation.

According to Table 4, the conceptual model fit indices are at the perfect fit level. However, in order to accept the conceptual model, in addition to the chi-square and fit indices, the regression and correlation coefficients must be at least .05 level (Şimşek, 2007). The significance of regression and correlation coefficients besides the fit indices and chi-square value of the model supports model fit. The regression coefficients of the road relations of the conceptual model are given in Table 5.

**Table 5. Regression coefficients of the conceptual model**

<table>
<thead>
<tr>
<th>Label</th>
<th>Standardized $r^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPOC</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>SUOC</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>BUC</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>TOC</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>SUPOC</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>SUOC</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>BUC</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>TOC</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- SUPOC</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- SUOC</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- BUC</td>
</tr>
<tr>
<td>PC</td>
<td>&lt;--- TOC</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- HPS</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- SPS</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- SUPOC</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- SUOC</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- BUC</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- TOC</td>
</tr>
<tr>
<td>PE</td>
<td>&lt;--- PC</td>
</tr>
</tbody>
</table>

As seen in Table 5, the regression coefficients between some variables are not significant (X) ($p>.05$). For this reason, the meaningless regression coefficients were deleted from the model in order from highest to lowest, and the analysis was renewed after each deletion. The measurement model obtained as a result of this modification is given in Figure 3.
The fit indices for the measurement model shown in Figure 3 are given in Table 6.

Table 6. Measurement model fit indexes

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$p$</th>
<th>$\chi^2$/df</th>
<th>SRMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>5.766</td>
<td>7</td>
<td>.567</td>
<td>.824</td>
<td>.021</td>
<td>.995</td>
<td>.981</td>
<td>.994</td>
<td>1.000</td>
<td>1.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Achieved values</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
<th>Perfection Fit</th>
</tr>
</thead>
</table>

$\chi^2$=Chi-square; df=degree of freedom; $p<.05$; SRMR= Standardized root mean square residual; GFI= Goodness-of-fit index; AGFI=Adjusted goodness-of-fit index; NFI=Normed Fit Index; TLI=Tucker-Lewis Index; CFI= Comparative Fit Index; RMSEA= Root mean square error of approximation.

When Table 6 is examined, it is understood that all fit indices of the measurement model show a perfect fit. After the fit indexes, it has been again checked whether the regression coefficients were significant and given in Table 7.

When Table 7 is examined, it is seen that all the regression coefficients are significant ($p < .05$). According to the measurement model, soft power sources explain 13% of the total variance in the support-oriented culture, 12% of the total variance in the success-oriented culture. Also, it explains, 3% of the total variance in the bureaucratic culture, and 10% of the total variance in the task-oriented culture. Soft power sources together with support-oriented culture, success-oriented culture, and task-oriented culture explain 52% of the total variance in the psychological climate. Soft power sources and task-oriented culture, soft power sources and
support-oriented culture, success-oriented culture, task-oriented culture, and psychological climate together explain 25% of the total variance of psychological empowerment.

Table 7. Regression coefficients of path relationships in the measurement model

<table>
<thead>
<tr>
<th></th>
<th>r²</th>
<th>S.E.</th>
<th>C.R.</th>
<th>p</th>
<th>Standardize r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPOC</td>
<td>----</td>
<td>.223</td>
<td>.031</td>
<td>7.307</td>
<td>***</td>
</tr>
<tr>
<td>SUCOC</td>
<td>----</td>
<td>.218</td>
<td>.032</td>
<td>6.881</td>
<td>***</td>
</tr>
<tr>
<td>TOC</td>
<td>----</td>
<td>.171</td>
<td>.027</td>
<td>6.277</td>
<td>***</td>
</tr>
<tr>
<td>PC</td>
<td>----</td>
<td>.196</td>
<td>.045</td>
<td>4.337</td>
<td>***</td>
</tr>
<tr>
<td>PC</td>
<td>----</td>
<td>.236</td>
<td>.046</td>
<td>5.114</td>
<td>***</td>
</tr>
<tr>
<td>PC</td>
<td>----</td>
<td>.146</td>
<td>.038</td>
<td>3.808</td>
<td>***</td>
</tr>
<tr>
<td>BUC</td>
<td>----</td>
<td>-.111</td>
<td>.032</td>
<td>-3.404</td>
<td>***</td>
</tr>
<tr>
<td>PE</td>
<td>----</td>
<td>.168</td>
<td>.056</td>
<td>3.033</td>
<td>.002</td>
</tr>
<tr>
<td>PE</td>
<td>----</td>
<td>.473</td>
<td>.069</td>
<td>6.824</td>
<td>***</td>
</tr>
</tbody>
</table>

In other words, soft power sources affect the support-oriented culture, success-oriented culture, and task-oriented culture positively, while it affects the bureaucratic culture negatively. Soft power sources together with support-oriented culture, success-oriented culture, and task-oriented culture affect the psychological climate positively. Bureaucratic culture does not affect the psychological climate. Soft power sources and task-oriented culture, soft power sources and support-oriented culture, success-oriented culture, task-oriented culture, and psychological climate together have a positive effect on psychological empowerment.

According to these findings, whether or not conceptually hypotheses are admitted is given in Table 8.

Table 8. Acceptance-rejection status of hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Acceptance</th>
<th>Rejection</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁ School principal's power sources affect psychological empowerment.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>H₂ Power sources affect the psychological climate</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>H₃ School culture has an impact on its psychological climate.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>H₄ Power sources affect school culture.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>H₅ Psychological climate affects psychological empowerment.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>H₆ School culture affects psychological empowerment.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

According to Table 8, H₁ and H₂ hypotheses were rejected and H₃, H₄, H₅, and H₆ hypotheses were accepted.

**DISCUSSION AND CONCLUSION**

The purpose of this study is to determine the pattern of relationships between the sources of power used by school principals, school culture, and psychological climate, which are considered as the primary variables affecting the psychological empowerment of teachers in the school context. The conceptual model created for this purpose has been tested with the collected data. As a result of the first analysis:

- While soft power sources positively affect psychological empowerment; harsh power sources have no effect.
• While soft power sources positively affect the cultures of task-oriented, success-oriented, and support-oriented; it affects bureaucratic culture negatively. Harsh power sources do not affect the cultural dimensions of the school.
• While soft power sources positively affect the psychological climate; harsh power sources have no effect.
• While success-oriented culture and task-oriented culture have positive effects on psychological empowerment; bureaucratic culture and support-oriented culture do not affect psychological empowerment.
• While success-oriented culture, task-oriented culture, and support-oriented culture affect the psychological climate positively; bureaucratic culture does not affect.
• Psychological climate positively affects psychological empowerment.

However, when all the variables are added to the model, the power sources of school principals affect the psychological climate through school culture. Similarly, the power sources of school principals affect the psychological empowerment levels of teachers through both school culture and psychological climate. Because when power sources of school principals and school culture, psychological climate, and psychological empowerment are analyzed one by one, power sources affect variables different levels. However, when a strong variable such as a school culture that affects the entire functioning of the organization and employees is added to the model, the direct effect of power sources of school principals on psychological climate and psychological empowerment disappears. School principals’ power psychological affect psychological climate and psychological empowerment through school culture. This result actually has proved to us once again how effective school culture is in the organization.

As a result of the research, the psychological of soft power (expertise, informational, loyalty, and charisma) affect the culture of support-oriented, culture of success-oriented and task-oriented positively and significantly, while negatively affecting the bureaucratic school culture. This result is predictable; because, in a school dominated by bureaucratic culture, a more central structure and a stiff hierarchy draw attention (Özdemir, 2012). Therefore, it can be said that the administrators who mobilize their teachers with their expertise or charismatic features do not need a prescriptive and strict structure inherent in the bureaucratic culture and this situation is reflected in the existing culture of the school.

According to another result of the research, soft power psychological such as informational, loyalty, expertise and charisma power does not directly affect the psychological climate and psychological empowerment. This result is not compatible with other research findings in the literature. Because, the psychological climate is expressed as the whole of the attitudes and reactions related to the organization that the individual is in and the power psychological used by managers affect the attitudes, behaviors, and responses of the employees (Altinkurt, Yılmaz, Erol and Salali; 2014; Atmaca, 2014, Özcan, Çağlar, Karataş and Polat, 2014; Yılmaz and Altinkurt, 2012). When the psychological climate perceived by teachers and the psychological of power used only by their administrators is examined, it is seen that the power sources affect the psychological climate, but when analyzed together with the school culture variable; it was observed that the power resources used by the manager did not affect the psychological empowerment of the teachers. The reason for this is that school culture is a very dominant variable and it affects psychological empowerment with its own dynamics by neutralizing the effects of the power resources used by the administrators when it comes into play.

In the research, support-oriented culture, success-oriented culture, and task-oriented culture positively affect the psychological climate. In schools where the culture of support is dominant, mutual respect, understanding, and cooperation are observed among the employees. (Sezgin, 2010; Özdemir, 2012). The focus of organizational behavior is the support given to the employees (Aydın, 2010). The basic element of educational organizations is human, in this case,
it does not seem possible that the psychological climate consisting of individuals' opinions and feelings will not be effective in schools. If there is a developed culture of support, success, and duty in schools, it can be thought that this situation directly affects teachers' perception of the psychological climate.

Demir (2010) stated that the level of psychological empowerment depends on the strength of the organizational culture. Bolat, Bolat, and Yüksel (2016) stated that a hierarchy culture has a positive effect on psychological empowerment. Emet (2006), on the other hand, revealed that the effect of organizational culture on psychological empowerment remains limited. In this study, the research findings reveal that the culture of task-oriented and the culture of success-oriented positively affect psychological empowerment. In this case, it is possible to say that directing the organizations according to the support and goals of psychologically strengthens teachers.

Another result of the research is that my psychological climate positively affects psychological empowerment. In this case, when teachers' personal perceptions about their schools are positive, their job competencies and effects are also positively affected. This result is important since there is no other study in the literature that examines the relationship between psychological climate and psychological empowerment.

The variables of power sources, psychological empowerment, school culture, and psychological climate were generally often tried to be associated in binary and it was observed that the variables affect each other. However, it is an important result that there is no other study evaluating the four variables together and that the school culture variable is the most dominant and effective variable in the psychological empowerment of teachers.

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gen_Psychological_empowermen
t_Scales


Güç Türleri, Psikolojik Güçlendirme, Okul Kültürü ve Psikolojik İklim Arasındaki Ilişkiler: Bir Yapısal Eşitlik Modellemesi

Dr.Öğr.Üyesi Pınar Mert
İstanbul Sabahattin Üniversitesi-Türkiye
pinar.mert@izu.edu.tr

Dr.Öğr.Üyesi Mustafa Özgenel
İstanbul Sabahattin Üniversitesi-Türkiye
mustafa.ozgenel@izu.edu.tr

Özet:
Bu araştırma, psikolojik güçlendirmeyi etkilediği düşünülen okul yöneticilerinin güç kaynakları, okul kültürü ve psikolojik iklimi hakkında bir çıkarım yapmak amacıyla hazırlanmıştır. Çalışma, önerilen kavramsal modeli test etmek için korelasyon araştırma modeline göre tasarlanmış, yürütülmüş ve bu model Yapısal Eşitlik Modeli (SEM) ile test edilmiştir. Araştırmda 358 öğretmen (252 kadın ve 97 erkek) katılmıştır. Bulgular uyum indekslerine göre değerlendirilmiş ve yapılan modifikasyon sonucunda modelin uyum değerlerinin mükemmel düzeyde olduğu belirlenmiştir ($\chi^2=5.766; df=7; p=.567; \chi^2/df=.824; SRMR=.021; GFI=.995; AGFI=.981; NFI=.994; TLI=1.000; CFI=1.000; RMSEA=.000$). Elde edilen modele göre; okul müdürlerinin kullandıkları yumuşak güç türleri, psikolojik güçlendirmeyi olumlu etkilerken; sert güç türleri psikolojik güçlendirmeyi etkilememektedir. Yumuşak güç türleri, görev kültürünü, başarı kültürünü ve destek kültürünü olumlu etkilerken; bürokratik kültür olumsuz etkilemektedir. Sert güç türleri, okulun kültürel boyutlarını etkilemektedir. Yumuşak güç türleri, psikolojik iklimi olumlu etkilerken; sert güç türlerinin etkisi bulunmamaktadır. Başarı kültür ve görev kültür, psikolojik güçlendirmeyi olumlu etkilerken; bürokratik kültür ve başarı kültür, psikolojik güçlendirmeyi etkilemektedir. Başarı kültür, görev kültür ve destek kültür, psikolojik iklimi olumlu etkilerken; bürokratik kültür etkilememektedir. Psikolojik iklim, psikolojik güçlendirmeyi olumlu etkilemektedir. Araştırmanın sonucunda okul kültürünün psikolojik iklim ve psikolojik güçlendirmeyi etkileyen önemli bir faktör olduğu görülmüştür.

Anahtar Kelimeler: Psikolojik güçlendirmeye, Okul Kültürü, Psikolojik İklim, Güç Kaynakları

Gönderim : 2020-06-11
Kabul   : 2020-07-06

Önerilen Atıf:

![Şekil 1. Kavramsal model](image)

- Güç türleri, okul kültürünü, psikolojik iklimi ve psikolojik güçlendirmeyi etkilemektedir.
- Okul kültürü, psikolojik güçlendirmeyi etkilemektedir.
- Okul kültürü, psikolojik iklimi etkilemektedir.
- Psikolojik iklim, psikolojik güçlendirmeyi etkilemektedir.
- Güç türleri ile okul kültür birlikte, psikolojik güçlendirmeyi etkilemektedir.
- Güç türleri ile psikolojik iklim birlikte, psikolojik güçlendirmeyi etkilemektedir.
- Okul kültürü ile psikolojik iklim birlikte, psikolojik güçlendirmeyi etkilemektedir.
- Güç türleri ile okul kültür ve psikolojik iklimi birlikte, psikolojik güçlendirmeyi etkilemektedir.

Yöntem:

Bulgular: Önerilen kavramsal model, toplanan verilerle test edilmiştir. Modeli değerlendirmek için regresyon yol katsayıları ve uyum indeksleri incelenmiştir. Anlamlı olmayan regresyon yol katsayıları modelden silinmiş, yeniden analiz yapılmış ve ölçüm modelinin mükemmel uyum gösterdiği tespit edilmiştir ($\chi^2$=5.766; df=7; p=.567; $\chi^2$/df=.824; SRMR=.021; GFI=.995; AGFI=.981; NFI=.994; TLI=1.000; CFI=1.000; RMSEA=.000).