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The Relationship between Shared Leadership, Employee Empowerment and Innovativeness in Primary Schools: A Structural Equation Modeling

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Abstract: Shared leadership and employee empowerment develop positive feelings in employees towards the organization, the work they do and themselves. These positive emotions create confidence for employees to try new methods and techniques in their work. Employees who approach their work with an innovative mindset will be more beneficial to their organizations and increase their own satisfaction. In this study, the shared leadership, employee empowerment and innovativeness levels of schools, the relationship of these variables with each other and the predictive status were examined according to the perceptions of the teachers. This study is a research in relational survey model. The data of the research were collected in the province of Malatya in November during 2019-2020 academic year. The data were collected through "Shared Leadership", "Employee Empowerment" and "Innovativeness" scales. Correlation analysis and structural equation modeling were used to analyze the data. According to the results of the research, the levels of shared leadership, employee empowerment and innovativeness in primary schools are "partially high". There is a positive, significant and moderate relationship between the school's shared leadership and employee empowerment and teachers' innovativeness. In addition, shared leadership and employee empowerment predict teachers' innovativeness. For this reason, it is considered important to create a school environment where leadership is shared in order to increase the innovativeness of teachers and to support teachers and include them in decision-making processes in order to empower them.

Keywords: Shared leadership, employee empowerment, innovativeness.

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Introduction

In our age, especially after 2000s, information produced anywhere in the world can be accessed everywhere worldwide at the same time thanks to the rapid spread of information and communication technologies. Undoubtedly, educational organizations also get their share from this rapid production and spread of information. Therefore, modern approaches should replace classical practices in educational administration, as well. The most important of these approaches include sharing leadership in organizations, empowering employees and having innovative goals (Büyükeşer et al., 2019; Currie & Spyridonidis, 2019).

The aim of this study is to examine the innovativeness needed by educational organizations in a competitive environment that is getting more and more tougher day by day and sometimes in compulsory situations such as pandemics. Innovativeness will enable organizations to progress faster and thus become stronger. In this respect, knowing the variables that affect innovativeness may be useful for organizations. It is important to increase the positive influences and reduce the negative ones as much as possible. It is thought that this study will make an important contribution to the field in terms of examining how shared leadership and employee empowerment affect innovativeness in organizations. It also needs to lead innovative solutions in educational organizations that need to lead all segments of society in all areas (Fedorov et al., 2020).

Currently, organizations in different geographies of the world are closely following each other and scientific developments, where technology and communication have experienced great developments. The success or failure of an organization anywhere in the world affects other organizations in a very short time. In selecting the subject of the

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study, an attempt was made to look for answers to a common question for educational organizations. Although the data of this study was collected from Turkey, the results and results obtained are also important for educational organizations in other parts of the world.

Shared Leadership

Although the idea of shared leadership was introduced in the 1920s (Ensley et al., 2006), scientific studies have largely started from the late 20th century on (Firestone, 1996; Weiss & Cambone, 1994). Shared leadership implies that the leadership role in the organization is played by many employees, not just the officially appointed person or senior officials (Carson et al., 2007; Harris, 2003; Harrison, 2005; Ozer & Beycioglu, 2013; Spillane et al., 2001). This type of leadership has three main characteristics; it is a common product that emerges as a result of the interaction of employees with each other, this type of leadership does not have definite boundaries, and leadership practices can be reproduced with the common effort of all employees (Bolden et al., 2009). With shared leadership practices, employees' hidden talents are revealed (Gronn, 2002), employees can overcome their own limits, and the focus is on the interaction between the leader and the followers (Spillane, 2006). The sharing and interactional behaviors of the employees in the organization increase both their individual and team capacities (Yukl, 2002). The disclosure of the high capacities and hidden talents of the employees can provide significant benefits for the organization.

One of the important aspects of shared leadership is ensuring the participation of employees in decision making and problem solving processes at the organization. Employees who participate in these processes will be more effective in collective activities since they will experience the opportunities and difficulties of the organization at first hand (Pearce et al., 2008). Employees who make decisions together place more value on each other's opinions and thoughts (Gu et al., 2016). Employees who make joint decisions will both influence and support their friends, and increase each other's motivation and responsibility-taking skills (Carson et al., 2007; Cobanoglu, 2020; Pearce et al., 2003). Empowering employees by sharing leadership will ultimately positively influence the organization to achieve its goals. There is no study that deals with the relationship between shared leadership and innovativeness in the literature of educational sciences. However, it is one of the issues discussed in other literature. Hoch (2013) examined the effect of sharing leadership on employees' innovativeness in two companies in the private sector. At the end of the research, it was stated that shared leadership strongly predicted innovativeness. In another study, Lee et al. (2018) examined the effect of shared leadership on employee innovativeness. In this study, it was stated that shared leadership both directly affects innovativeness and has an indirect effect on trust. One of the studies examining this kind of relationship is a study in which 121 teams from different sectors such as finance company, oil company, automobile company and construction company were examined (Jeong & Kim, 2014). According to the result, it was seen that shared leadership has a positive effect on team innovativeness and effectiveness. In a study conducted in the service sector in Pakistan, Fatima et al. (2017) examined the impact of participatory leadership on innovativeness. The result of this study shows that participatory leadership positively affects innovativeness.

Employee Empowerment

The machine-human perspective has changed in the modern period for those who work in classical understanding and continues to change. The perception of employees as human and different from machines has greatly changed the perspective of employees in organizations. With this change, efforts have been made to understand employees' feelings, thoughts and behaviors. It has begun to be discussed that emotions, thoughts and behaviors can not only be understood but also managed. It is thought that creating positive emotions in employees contributes to performance, and performance contributes to the organization's achievement of its goals more effectively and efficiently (Acaray, 2019; Sahin & Caliskan, 2018).

One of the ways to increase the performance and motivation of the employees is to strengthen them. Employees need to be strengthened in order to increase their creativity, innovativeness capacity and flexibility (Donmez, 2012). Empowerment is a fundamental feature that positively affects success, productivity and growth in organizations (Hunjra et al., 2011; Tindowen, 2019). Empowerment is when employees have decision-making authority or an environment in which they can take responsibility for their tasks (Erstad, 1997). Bowen and Lawler (1992) consider the sharing of the following four inputs of the organization with employees as empowering them: (1) sharing information about the organization's performance, (2) sharing information about the rewards related to the performance in the organization, (3) sharing information that will enable employees to understand and contribute to the organization's performance and (4) sharing the power to make decisions that affect the direction and performance of the organization.

Employee empowerment will enable employees to exercise discretion in the organization. Using discretion and the power to try unique ways is the first step to start innovating in the organization (Kanter 1982; Pierce & Delbecq 1977). Similarly, Spreitzer (1995) states that empowerment of employees directly affects both effective management and innovativeness. Empowered employees in organizations will play active roles such as developing creative methods and implementing innovative practices (Dogan, 2006). In the literature, there are studies examining the relationship between employee empowerment and innovativeness. Edu-Valsania et al. (2014) conducted one of these studies with

212 people working in different sectors in Spain. In the study, the relationship between employee empowerment and innovativeness was examined. As a result of the study, it has been determined that empowerment positively affects entrepreneurial and innovative behaviors in the organization. In another study, Cavus and Akgemici (2008) investigated how empowerment and delegation of employees affect their capacity to innovate. According to the result, it is stated that empowering employees and delegation of authority increase the capacity of employees to make innovations. In another study conducted in the automotive sector, the effect of employee empowerment on the innovativeness of employees was examined and it was concluded that empowerment positively affected innovativeness (Tekin & Akgemici, 2019). The relationship between employee empowerment and innovativeness has also been studied in many different areas: In the industrial sector (Spreitzer, 1995), manufacturing companies (Knight-Turvey, 2006; Erturk, 2012), small and medium-sized companies (Cakar & Erturk, 2010; Sinha et al., 2016; Prabowo et al., 2018) and universities (Khan et al., 2019). All the studies mentioned have concluded that employee empowerment positively affects the innovativeness of the employees.

Innovativeness

Nowadays, organizations care about trying new methods beyond the classical applications in the execution of their business in order not to be left behind in the competition. This can only happen with the opportunities and abilities of the employees to make innovations. Employees can take responsibility for their organizations only if they are supported and empowered by their leaders and at the same time motivated to try new methods (Parzefall et al., 2008). Using new methods and techniques or trying new courses in organizational processes can be possible with an innovative understanding. Innovation is the application, use or production of an idea, tool, system, policy, program, service or a product different from previous methods (Gules & Bulbul, 2002). In other words, innovativeness is using a new method, providing a new input or obtaining a new product in a way that no organization has done before (Ersoy & Muter, 2008).

There are some requirements for innovativeness to exist in the organization. It is important that innovativeness is embraced by all employees and a special effort is made in this regard. Employees should have the authority to take responsibility and make decisions, and their ideas should be valued (Pierce & Delbecq, 1977). Sharing leadership in the organization and providing the employees with the opportunity to lead is a basic requirement for the initiation and continuation of innovativeness (Hevesli, 2016; Kanter 1982). It will be easier for employees who feel strong in the organization to develop innovative ideas. While administering an innovative process, employees should (1) identify problems, (2) classify thoughts and suggestions, (3) establish the infrastructure for the implementation of ideas for solution, and (4) implement them (Scott & Bruce, 1994). Organizations where leadership is shared, employees are strengthened and innovative understanding is adopted and implemented by all employees will be able to achieve significant gains.

It has been stated in many studies that if an organization is innovative, then it is more successful in competing with other organizations, and that if its employees have an innovative approach, this will make them more successful than other employees (Amabile, 1988; Unsworth & Parker, 2003; Van de Ven, 1986). Innovativeness in educational organizations should be handled and analyzed more particularly than other organizations because educational organizations closely concern the future of countries, and especially in this age of globalization, of all humanity. There are three important dimensions of innovativeness in educational organizations (Thurlings et al., 2015): (1) ensuring the adaptation of individuals to society in the rapidly changing information age, (2) the need for new methods, techniques, tools and perspectives in the field of education, (3) the need for educational organizations to lead in order to compete with other societies. In this study, it is thought that leadership should be shared in educational organizations and employees should be strengthened in order for innovativeness to be implemented strongly by them. The aim of this research is to determine the relationship between shared leadership and employee empowerment in educational organizations and employee innovativeness. For this purpose, the following hypotheses have been developed.

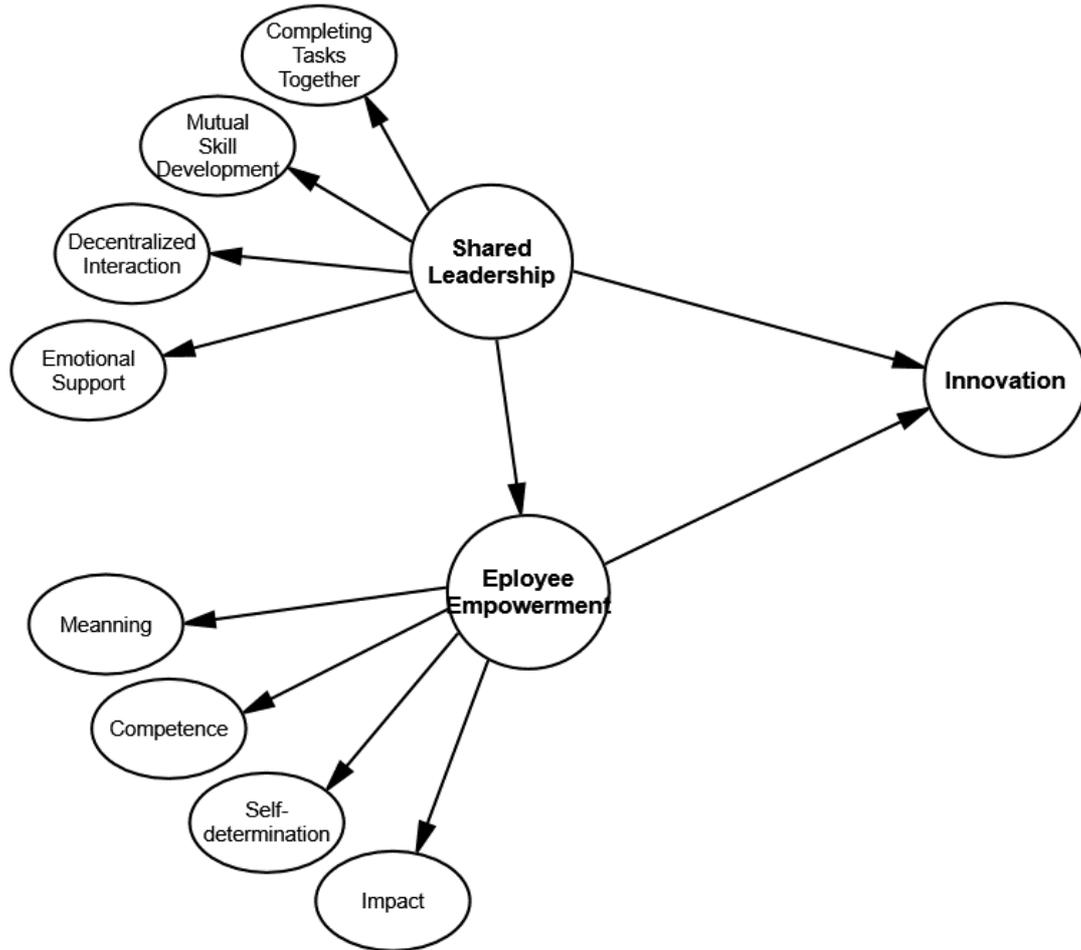


Figure 1: Hypotheses to test

The following hypotheses have been tested in this research:

H1: Sharing leadership at school positively affects teachers' innovativeness.

H2: Empowerment of employees at schools positively affects teachers' innovativeness.

H3: Shared leadership at school positively affects the perception of employee empowerment

Methodology

Research Model

In this study, it is desirable to examine the relationship between shared leadership, staff empowerment and innovation in schools. It is believed that there is a relationship between these variables. The model to be used in the research should be a model that can reveal the relationships between these variables. For this reason, the relational survey model was used to study the relationships between variables (Cohen et al., 2000; Karasar, 2012).

Population and Sample

The population of the research consists of teachers working in primary schools connected to the Ministry of Education in the 2019-2020 academic year in Malatya province, Turkey. There are 5645 teachers in primary schools in the center of Malatya. These teachers constitute the population of the research. Due to the difficulty in reaching the entire population, limited time and economic reasons, a sample large enough to represent the population was studied. Since the general characteristics of the schools in the research population are similar to each other, the schools included in the sample were chosen randomly. In determining the number of samples, it was seen that the sufficient sample size could be 359 teachers in the calculation made with the formula prepared for the situations where the total number of the population is certain (Balci, 2010, as cited in Cochran, 1962). In this study, 532 teachers were evaluated as a sample.

The frequency and percentage distributions showing the demographic characteristics (gender, age, seniority) of the sample are as in Table 1 below.

Table1. Demographic Characteristics of Participants

Variables	Sub-dimensions	f	%
Gender	Male	272	51,1
	Female	260	48,9
Age	20-29	100	18,8
	30-39	128	24,1
	40-49	140	26,3
	50-59	124	23,3
	60 and older	40	7,5
Seniority	0-10 years	148	27,8
	11-20 years	208	39,1
	21-30 years	136	25,6
	Over 30 years	40	7,5

Research Instruments

The form used to collect the data from the population of the research consists of four parts. In the first part, there are questions asking the demographic characteristics of the participants. The "Shared Leadership Scale" is in the second part, "Employee Empowerment Scale" in the third part and "Innovativeness Scale" in the last part. Five-point Likert type scales were used and scored as "1 = I totally disagree"; "2 = I do not agree"; "3 = I partially agree"; "4 = I agree"; and "5 = I totally agree". While analyzing the scores obtained with this scale, their arithmetic mean was rated as 1.00-1.80: "very low", 1.81-2.60: "partially low", 2.61-3.40: "moderate", 3.41-4.20: "partially high", and 4.21- 5.00: " very high ".

Shared Leadership Scale: The shared leadership scale used in the study was developed by Wood (2005) and adapted to Turkish by Bostancı (2012). The scale consists of 18 items and 4 dimensions. These dimensions consist of "completing tasks together" (9 items), "mutual skill development" (2 items), "decentralized interaction" (4 items), and "emotional support" (3 items). Items 12, 14 and 15 of the decentralized interaction sub-dimension are reverse-coded items. The Cronbach's alpha (α) reliability coefficient calculated by Bostancı (2012) in the original scale is .91. Fit values of the original scale; RMR = 0.025, RMSEA = 0.055, AGFI = 0.87, GFI = 0.90, NFI = 0.94 and CFI = 0.95. $p = 0.00$, χ^2 (Chi-square) = 220.30, $df = 129$, $\chi^2 / df = 1.53$.

Explanatory and confirmatory factor analyzes were made to the scale within the scope of this study. Since the Bartlett test result is significant ($p = .000$) and the Kaiser-Meyer-Olkin (KMO) coefficient is .86, the data matrix was found to be suitable for factor analysis. Four factors of the scale explain 65.34% of the total variance in the measuring tool. Cronbach's alpha reliability coefficient of the shared leadership scale was found to be .90. The factor loads of the items in the "completing tasks together" dimension of the scale are between .888 and .612, the factor loads of the items in the "mutual skill development" dimension are between .808 and .737, the factor loads of the items in the "decentralized interaction" dimension are between .656 and .554, and the factor loads in the "emotional support" dimension are between .829 and .602.

As a result of the confirmatory factor analysis, it was seen that the four-dimensional factor structure of the shared leadership scale has a good level of fit index (χ^2 (Chi-square) = 183.99, df (degrees of freedom) = 79, $\chi^2 / df = 2.33$, $p = 0.00$, RMSEA (Root Mean Square Error of Approximation) = 0.05, NFI (Normed Fit Index) = .90, IFI (Incremental Fit Index) = .97, TLI (Tucker-Lewis Index) = .97, CFI (Comparative Fit Index) = .97). When two or more scales are applied together, the problem of common variance may arise. As a result of the composite reliability analysis performed in the study, it was seen that there was no common variance problem (CR (composite reliability) = .94, AVE (average variance extracted) = .53)

Employee Empowerment Scale: The employee empowerment scale used in the study was developed by Spreitzer (1995) and adapted to Turkish by Col (2004). The scale consists of 12 items and 4 dimensions. These dimensions consist of "meaning" (3 items), "competence" (3 items), "autonomy" (3 items) and "impact" (3 items). Cronbach's alpha (α) reliability coefficient calculated by Çöl (2004) in the original scale is .85. It is seen that the factor loads of all items in the scale are over .80. Explanatory and confirmatory factor analyzes were made to the scale within the scope of this study. Since the Bartlett test result is significant and the Kaiser-Meyer-Olkin (KMO) coefficient is .82, it was seen that the data matrix is suitable for factor analysis. Four factors obtained in the scale explain 82.61% of the total variance in the measurement tool. Cronbach's alpha reliability coefficient of the employee empowerment scale was found to be .87. The factor loads of the items in the "meaning" dimension in the scale are between .878 and .830, the factor loads of the items in the "competence" dimension are between .829 and .807, the factor loads of the items in the "autonomy" dimension are between .847 and .782, and the factor loads of the items in the "effect" dimension are between .937 and .889.

As a result of the confirmatory factor analysis, it was seen that the four-dimensional factor structure of the employee empowerment scale had good fit index ($\chi^2 = 154.90$, $df = 68$, $\chi^2 / df = 2.28$, $p = 0.00$, RMSEA = 0.05, NFI = .95, IFI = .98, TLI =

.98, CFI = .99). As a result of the composite reliability analysis performed in the study, it was seen that there was no common variance problem (CR = .97, AVE = .73).

Innovative Behavior Scale: The innovativeness scale used in the research was developed by Scott and Bruce (1994) and adapted into Turkish by Caliskan et al. (2019). The scale consists of 6 items and one dimension. The Cronbach's alpha (α) reliability coefficient calculated in the original of the scale is .91. The Kaiser Meyer-Olkin (KMO) sample fit coefficient is 0.84 and the Bartlett-Sphericity test chi-square value is 1817.334. The total variance explained in the scale is 69.28. Explanatory and confirmatory factor analyzes were made to the scale within the scope of this study. Since the Bartlett test result is significant and the Kaiser-Meyer-Olkin (KMO) coefficient is .83, it was seen that the data matrix is suitable for factor analysis. The only factor obtained in the scale explains 66.60% of the total variance in the measurement tool. Cronbach's alpha Reliability Coefficient of the innovativeness scale was found to be .90. The factor loads of the items in the scale are between .871 and .751. As a result of the confirmatory factor analysis, it was seen that the one-dimensional factor structure of the innovativeness scale had good fit index ($\chi^2= 29.06$, $df= 8$, $\chi^2 / df= 3.63$, $p= 0.00$, RMSEA= 0.08, NFI= .94, IFI= .96, TLI= .92, CFI= .96). As a result of the composite reliability analysis performed in the study, it was seen that there was no common variance problem (CR= .92, AVE= .66).

Common Variance Analysis

Collecting data from a single source or using different scales together in the same time frame is expressed as the common method variance deviation. This negativity can be detected by applying Harman's single factor test (Podsakoff et al. 2003) to the scales used in the study. In this respect, non-cyclic factor analysis was performed with 36 items of three variables. It was seen that the variance explained by a single and general factor was 29%. This low amount of common variance shows that there is no common variance problem in scales.

Data Analysis

Data was entered into the computer, and substances that were reverse encoded on the scales were converted to the correct state before they were analyzed. Excessive values that can be accidentally written when entering data are cleared. Later, skewness and kurtosis coefficients were examined and normality values were examined. The validity and reliability of the data were examined. Validity and reliability analysis of the scales were made. Factor analysis and Cronbach's alpha values showed that the scales were valid and reliable. Data collected for research, were analyzed using the Structural Equation Modeling (SEM) method. In the study, the relationship of more than two variables with each other and the state of each other will be examined. It was decided to use structural equality models, since independent regression or factor analysis can combine them in a single analysis and look at the relationship between them using variance and covariance. SEM analyzes were made with the AMOS program. First of all, confirmatory factor analyzes (CFA) of the scales used in the study (Shared leadership scale, Employee empowerment scale, Innovative behavior scale) were conducted. At this stage, the following values were taken as measure (Arbuckle, 2009; Byrne, 2010; Kline, 2011):

- If the value of χ^2/df is below 2, there is a good fit, if between 2 and 5, there is an acceptable fit.
- It is acceptable if the RMSEA value is between 0.08 and 0.05, if it is below 0.05 there is a good fit.
- If CFI, IFI, NFI and TLI values are between 0.90 and 0.95, there is an acceptable fit, and if it is greater than 0.95, there is a good fit.

Findings

The arithmetic mean and standard deviation values of the teachers' responses to the scales and the dimensions of the scales are shown in Table 2.

Table 2. Arithmetic Mean, Standard Deviation, Standard Error Values of Studied Variables

Variables	\bar{X}	SD	Std. E
Completing Tasks Together	3,79	,72	,06
Mutual Skill Development	3,72	,71	,06
Decentralized Interaction	3,80	,52	,04
Emotional Support	3,77	,67	,06
SHARED LEADERSHIP	3,77	,48	,04
Meaning	4,62	,60	,05
Competence	4,30	,61	,05
Self-determination	3,97	,84	,07
Impact	3,29	1,06	,09
EMPLOYEE EMPOWERMENT	4,05	,57	,05
INNOVATIVENESS	4,08	,75	,06

According to Table 2, the shared leadership at school and the dimensions of the shared leadership are at "partially high" level. The teachers gave the highest score to "*decentralized interaction*", while the lowest score was given to "*mutual skill development*". However, the difference is very small. While teachers rated the employee empowerment at a "partially high" level, they gave "high" scores to the two sub-dimensions of the employee empowerment. The highest score was given to the "meaning" dimension of the employee empowerment, while the lowest score (medium) was given to the "impact" dimension. On the other hand, teachers gave a "partially high" score to the innovativeness scale.

The correlation values indicating the level of relationship between shared leadership, employee empowerment and innovativeness variables and the direction of this relationship are given in Table 3.

Table 3. Correlation Values of Variables Examined within the Scope of the Research

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Completing Tasks Together	1										
2. Mutual Skill Development	,56**	1									
3. Decentralized Interaction	,22*	,23**	1								
4. Emotional Support	,51**	,51**	,22*	1							
5. Shared Leadership	,80**	,82**	,49**	,78**	1						
6. Meaning	,15	,17*	,11	,24**	,23**	1					
7. Competence	,07	,21*	,11	,13	,18*	,56**	1				
8. Self-Determination	,26**	,27**	,17	,27**	,33**	,51**	,42**	1			
9. Impact	,24**	,16	-,04	,29**	,24**	,27**	,18*	,37**	1		
10. Employee Empowerment	,27**	,27**	,10	,33**	,34**	,73**	,66**	,79**	,72**	1	
11. Innovativeness	,31**	,33**	,06	,27**	,35**	,51**	,47**	,42**	,48**	,64**	1

**p<.01 / *p<.05

According to Table 3, when looking at the relationships in the correlation matrix, the relationship between shared leadership and its dimensions; "completing tasks together" (very high), "mutual skill development" (very high), "decentralized interaction" (medium), and "emotional support" (high) is at a positive and significant level. In the same vein, the relationship between employee empowerment and its dimensions; "meaning", "competence", "autonomy" and "impact", is at a positive, significant and high level. The innovativeness variable is also positively and significantly associated with shared leadership (weak) and employee empowerment (high).

The structural model showing the effect of the school's shared leadership and employee empowerment on teachers' innovativeness is seen in Figure 2.

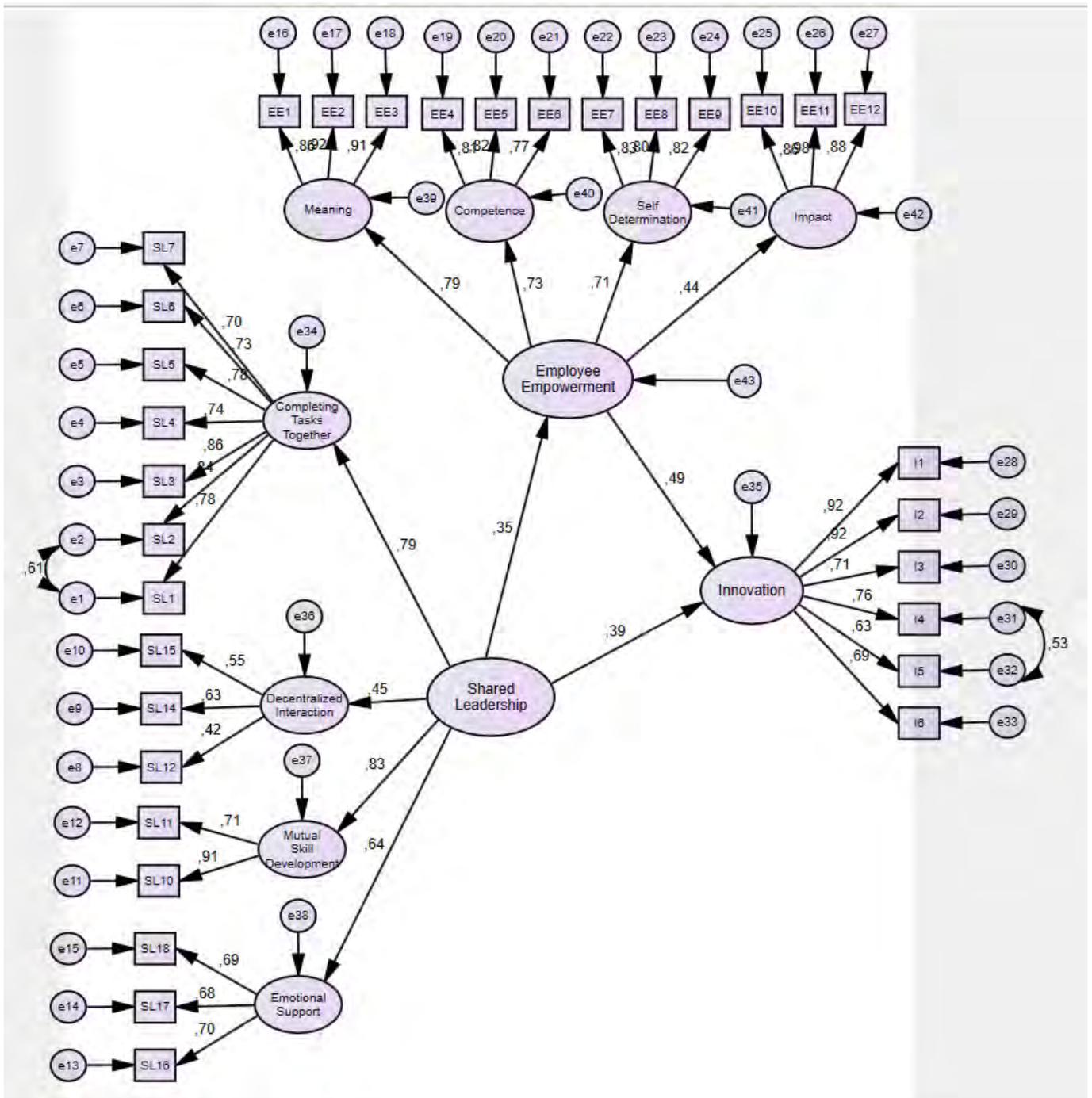


Figure 2. Structural model of how shared leadership and staff empowerment affects innovation, with standardized coefficients

Table 4. The Result of Regression Analysis

	b	β	SE	CR	p
Shared Leadership - Innovativeness	.517	.388	.186	4.437	<0.001
Employee Empowerment - Innovativeness	.634	.494	.192	4.645	<0.001
Shared Leadership - Employee Empowerment	.445	.350	.158	2.820	<0.001

The model obtained as a result of unstandardized regression coefficients (b), standardized regression coefficients (β), standard errors (SE), the critical values (CR) and P values are given in Table 4. According to the structural model in Figure 2, which produces the best compliance indices obtained, and the regression values in Table 4, the shared leadership of the school positively affects the teachers' innovativeness (β= .39, p<0.01, CR=4.437). The obtained regression values indicate that the first hypothesis (H1) has been confirmed. One unit increase in teachers' shared

leadership perception provides .39 units of innovativeness increase. As the positive perceptions regarding the shared leadership of the school increase, the innovativeness of teachers also increases.

Looking at the effect of employee empowerment on teachers' innovativeness, it is seen that it also has a positive impact ($\beta = .49$, $p < 0.01$, $CR = 4.645$). The obtained regression values indicate that the second hypothesis (H2) is confirmed. One-unit increase in teachers' perception of employee empowerment provides .49 units of innovativeness increase. As the positive perceptions regarding school's employee empowerment increase, the innovativeness of teachers also increases.

Looking at the effect of shared leadership on teachers' perception of employee empowerment, it is seen that shared leadership positively affects employee empowerment ($\beta = .35$, $p < 0.01$, $CR = 2.820$). The obtained regression values indicate that the third hypothesis (H3) has been confirmed. It is seen that for the one unit increase in shared leadership at school, there will be a .35 units of increase in the perception of teachers' employee empowerment.

Fit indices for shared leadership - employee empowerment - innovativeness model: $\chi^2 = 838.83$, $df = 484$, $\chi^2/df = 1.74$, $p = .000$, $NFI = .90$, $IFI = .95$, $TLI = .94$, $CFI = .95$, $RMSEA = .07$

Discussion

This study conducted in educational organizations helps us better understand the impact of shared leadership and employee empowerment on employee innovativeness. In the study, firstly, it was determined that the shared leadership of the school predicts the innovativeness of teachers. This shows that the H1 hypothesis has been confirmed. In the second data obtained, it is seen that staff empowerment in the school predicts the innovativeness of teachers. This situation shows that the H2 hypothesis has been confirmed. Another result is that school's shared leadership predicts teachers' perception of staff empowerment. This result confirms the H3 hypothesis.

There are many studies in the field that leadership affects innovativeness (Aykanat & Caliskan, 2019; Bozkurt & Goral, 2013; Cerne et al., 2013; Contreras, 2017; Gumusluoglu & Ilsev, 2009; Fidan, 2019; Nodl, 2017; Onhon, 2016). However, in this study, we specifically examine the predictive status of shared leadership on innovativeness. A study by Hoch (2013) on this subject was conducted with employees of two different companies. In the study, the effect of sharing leadership with a team within the organization with a collective leadership approach on innovativeness was examined. As a result of the research, it was stated that shared leadership strongly predicted innovativeness positively. The first hypothesis of the current study is that sharing leadership in educational organizations will positively affect teachers' innovativeness. Although this study and the study conducted by Hoch (2013) are in different fields, they are similar in terms of both their hypotheses and results. In another study examining the relationship between shared leadership and innovativeness (Lee et al., 2018), it is stated that shared leadership directly affects innovativeness, while it indirectly affects the sense of trust. The conclusion of this study that shared leadership affects innovativeness directly and positively shows the similarity between the two studies.

A study examining the impact of shared leadership on Team innovation (Sun et al., 2016) also found that shared leadership predicts innovation. The difference between Sun and others' research and this research is that team innovation has been studied. But this difference does not change the conclusion that shared leadership predicts employee innovation. Although there is no study conducted in educational organizations regarding the effect of shared leadership on innovativeness, there are various studies conducted in different fields. One of these studies is the study in which 121 teams from different sectors such as a finance company, an oil company, an automobile company and a construction company were examined (Jeong & Kim, 2014). The results obtained by the researchers showed that shared leadership has a positive effect on team innovativeness and effectiveness.

In a study conducted in the service sector in Pakistan, Fatima et al. (2017) stated that participatory leadership has a positive effect on innovativeness. In another study, which takes shared leadership as two sub-dimensions (mutual influence and proactive pursuit), the shared leadership-innovativeness relationship was examined (Hoegl & Muethel, 2007). It is stated in the study that shared leadership positively affects innovativeness in terms of "information exchange quality" and "compliance". The positive effect of both sub-dimensions on innovativeness confirms the result obtained in this study.

Another finding obtained in this study is that staff empowerment positively predicts innovation. The result is that empowering the employees with the decision-making authority and holding liable for the decisions they make will improve their innovativeness. In the study conducted by Edu-Valsania et al. (2014) with 212 people working in different sectors in Spain, it was determined that empowerment positively affected entrepreneurial and innovative behaviors in the institutions. A similar result was obtained in the study conducted by Cavus and Akgemici (2008). It is stated that empowerment of employees and transfer of authority increase the capacity of employees to make innovations. The above examples show similarities with the current study in terms of the effect of employee empowerment on employees.

Researching how shared leadership affects innovativeness, Ogut et al. (2007) stated in their study that organizations need to regulate their organizational structures and adopt a culture of empowering employees in order to create

innovativeness. In another study conducted in the automotive sector, it was concluded that empowerment greatly affects the innovativeness of employees (Tekin & Akgemici, 2019). The study also requires that employees find their jobs meaningful, contribute to business processes/results, and influence decision-making, as a requirement of empowerment for innovativeness to take place.

In this study, employee empowerment is considered as making work meaningful, job competence, decision-making autonomy and ability to affect the processes and results of the work, and it is stated that these psychological empowerment dimensions pave the way for employees to innovate (Sinha et al., 2016). Both studies bear great similarities with each other in these aspects. Empowering employees in the organization, making them more independent and giving them the opportunity to participate in decision-making processes will make them feel more valuable. As a result, they may be willing to make more effort in the organization, to be more entrepreneurial and more innovative. In a study by Prabowo et al. (2018), it is stated that transformational leadership strengthens employees, and as a result employees' innovativeness will increase. Various studies in the industrial sector (Spreitzer, 1995), manufacturing companies (Knight-Turvey, 2006; Erturk, 2012), small and medium-sized companies (Cakar & Erturk, 2010) and universities (Khan et al., 2019) also show that empowerment significantly affects innovativeness.

Conclusion

One of the results obtained in this study is that shared leadership positively affects innovativeness in employees. This result shows that the prediction in the 1st hypothesis is correct. Another result is that employee empowerment also positively affects innovativeness. This result shows that the second hypothesis came out as predicted. Shared leadership should be considered as employees' having a say in decisions and practices, completing tasks together, developing mutual skills, interacting with each other and receiving emotional support. When evaluated with these aspects, it was concluded that innovativeness was positively affected by all of them. Empowerment should be evaluated as the employee's finding meaning in his/her job, finding himself/herself competent in his/ her job, being able to use decision and authority in his/her job and believing that he/she is effective in the organization. Considering these aspects of employee empowerment, the results are obtained that each dimension positively affects innovativeness.

Recommendations

In educational organizations, teachers can be more involved in decisions and practices in order to increase teachers' innovativeness through shared leadership practices. In such organizations, official administrators can share some of their powers and responsibilities with teachers. Since the interaction of the employees in educational organizations with each other is higher than in other organizations, administrators and teachers can perform their duties cooperatively and by sharing. In order to increase employee innovativeness by empowering them, the employees can be given the opportunity to use his / her competence in the field of expertise in the organization. The employee can exercise autonomous authority especially for the work in his/her field. Employees can be given opportunities that may affect the organization's decisions, functioning and the results of the work done.

Researchers who will conduct research in the field can study the same subject at different educational levels or with different samples in different populations. Since shared leadership and employee empowerment are directly related to the psychology of employees, this issue can be examined in depth with qualitative methods.

Limitations

This study is limited to the data collected in Malatya in 2019 and to primary school teachers. Since this research is conducted with a quantitative method, it is limited to the data collected in a certain place and in a short time.

References

- Acaray, A. (2019). Pozitif psikolojik sermaye, duygusal emek, gorev performansı ve bağlamsal performans arasındaki ilişkinin incelenmesi: Bankacılık ve sigortacılık sektöründe bir çalışma [Examining the relationship between positive psychological capital, emotional labor, task performance, and contextual performance: A study in the banking and insurance industry]. *Journal of Cankırı Karatekin University Faculty of Economics and Administrative Sciences/ Cankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 9(1), 73-99.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10, 123-167.
- Arbuckle, J. (2009). *Amos 18 User's Guide*. IBM/SPSS Incorporated.
- Aykanat, Z., & Caliskan, M. (2019). Donusturucu liderlik ve orgutsel yenilikcilik arasındaki ilişki: Bir kamu kurumu örneği [The relationship between transformative leadership and organizational innovation: an example of a public institution]. *Kafkas University Journal of Economics and Administrative Sciences/ Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(20), 829-857.

- Bolden, R., Petrov, G., & Gosling, J. (2009). Distributed leadership in higher education. *Educational Management Administration and Leadership*, 37(2), 257-277.
- Bostancı, A. B. (2012). Paylaşılan liderlik algisi ölçeği'nin Türkçe uyarlaması [Turkish adaptation of shared leadership perception scale]. *International Journal of Human Sciences*, 9(2), 1619-1631.
- Bowen, D. E., & Lawlwe, E. E. (1992). The empowerment of service workers: What, why, how and when. *Sloan Management Review*, 33(3), 31-39.
- Bozkurt, O., & Goral, M. (2013). Modern liderlik tarzlarının yenilik stratejilerine etkisini belirlemeye yönelik bir çalışma [A study to determine the effect of modern leadership styles on innovation strategies]. *Anadolu University Journal of Social Sciences/ Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 13(4), 1-14.
- Buyukbese, T., Cavusoglu, S., & Okun, O. (2019). Otantik liderlik ile örgütsel bağlılık arasında psikolojik sermayenin aracılık rolü: Bingöl Üniversitesi örneği [The role of psychological capital between authentic leadership and organizational commitment: an example of Bingöl University]. *International Journal of Community Studies/ Uluslararası Toplum Araştırmaları Dergisi*, 10(17), 194-225.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS*. Routledge.
- Cakar, N. D., & Ertürk, A. (2010). Comparing innovation capability of small and medium-sized enterprises, examining the effects of organizational and empowerment. *Journal of Small Business Management*, 48(3), 325-559. <http://doi.org/10.1111/j.1540-627X.2010.00297.x>
- Caliskan, A., Akkoc, I., & Turunc, O. (2019). Yenilikçi davranış: Bir ölçek uyarlama çalışması [Innovative behavior: A scale adaptation study]. *International Journal of Economic and Administrative Sciences/ Uluslararası İktisadi ve İdari Bilimler Dergisi*, 5(1), 94-111. <http://doi.org/10.29131/uiibd.562196>
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal* 50(5), 1217-1234.
- Cavus, M. F., & Akgemici, T. (2008). İşletmelerde personel güçlendirmenin örgütsel yaratıcılık ve yenilikçiliğe etkisi: İmalat sanayiinde bir araştırma [The effect of personnel empowerment in enterprises on organizational creativity and innovation: A research in the manufacturing industry]. *Selçuk University Journal of Social Sciences Institute/ Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (20), 229-244.
- Cerne, M., Jaklic M., & Skerlavaj, M. (2013). Authentic leadership, creativity and innovation: A multilevel perspective. *Leadership*, 9(1) 63-85.
- Cevik T. I., & Akgemci, T. (2019). Psikolojik güçlendirmenin yenilikçi iş davranışına etkisi [The effect of psychological empowerment on innovative work behavior]. *Journal of Business Studies/ İşletme Araştırmaları Dergisi*, 11(3), 1674- 1692.
- Cobanoğlu, N. (2020). Investigation of shared leadership and organizational commitment in primary and secondary schools: Malatya case. *International Journal of Educational Methodology*, 6(3), 613-629. <https://doi.org/10.12973/ijem.6.3.613>
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.) Routledge Falmer.
- Col, G. (2004). *Güçlendirme ve örgütsel bağlılık ilişkisi üzerine bir araştırma* [A research on the relationship between empowerment and organizational commitment], [Unpublished doctoral thesis]. Gebze Teknik University.
- Contreras, F. (2017). Leadership and employees' innovative work behavior: Test of a mediation and moderation model. *Asian Social Science*, 13(9), 9-25.
- Currie, G., & Spyridonidis, D. (2019). *Sharing leadership for diffusion of innovation in professionalized settings*. *Human Relations*, 72(7), 1209-1233.
- Dogan, S. (2006). *Personel güçlendirme/ rekabette başarının anahtarı* [Empowerment of staff/ key to competitive success]. Kare.
- Donmez, G. (2012). *Personeli güçlendirme ve tükenmişlik ilişkisi: İş yükü-kontrolü modeli açısından bir değerlendirme* [Empowerment and burnout relationship: An evaluation in terms of workload-control model] [Unpublished master's thesis]. Balıkesir University.
- Edu-Valsania, S., Moriano, J. A., & Molero, F. (2014). Authentic leadership and intrapreneurial behavior: Cross-level analysis of the mediator effect of organizational identification and empowerment. *International Entrepreneurship and Management Journal*, 12(1), 131-152.
- Ensley, M. D., Hmieleski, K. M., & Pearce, C. L. (2006). The importance of vertical and shared leadership within new venture top management teams: Implications for the performance of startups. *The Leadership Quarterly*, 17(3), 217-231.

- Erturk, A. (2012). Linking psychological empowerment to innovation capability: Investigating the moderating effect of supervisory trust. *International Journal of Business and Social Science*, 3(14), 153-165.
- Ersoy A. B., & Muter S. C. (2008). Yenilikcilige yönelik devlet uygulamaları ve AB karşılaştırması [State practices for innovation and EU comparison]. *Management and Economics/ Yonetim ve Ekonomi*, 15(1), 59-74.
- Erstad, M. (1997). Empowerment and organizational change. *International Journal of Contemporary Hospitality Management*, 9(7), 325-333.
- Fatima, T., Majeed, M., & Saeed, I. (2017). Does participative leadership promote innovative work behavior: The moderated mediation model. *Business & Economic Review*, 9(4), 141-158.
- Fedorov, A. A., Sedykh, E. P., & Mialkina, E. V. (2019). University of education: Structure and main components of management. *European Journal of Educational Research*, 8(4), 1257-1268. <https://doi.org/10.12973/eujer.8.4.1257>
- Fidan, M. (2019). Öğretmenlerde bireysel inovasyon ile öz liderlik arasındaki ilişki [The relationship between individual innovation and self leadership in teachers]. *International Academy of Management Journal/ Uluslararası Yönetim Akademisi Dergisi*, 2(3), 518-527.
- Firestone, W. A. (1996). *Leadership roles or functions?* In K. Leithwood, J. Chapman, D. Corson, P. Hallinger & A. Hart (Eds.), *International Handbook of educational leadership and administration* (pp. 395-418). Kluwer Academic Publishers.
- Gronn, P. (2002). Distributed leadership as a unit of analysis. *Leadership Quarterly*, 13(4), 423-51.
- Gu, J., Chen, Z., Huang, Q., Liu, H., & Huang, S. (2016). A multilevel analysis of the relationship between shared leadership and creativity in inter-organizational teams. *The Journal of Creative Behavior*, 52(2), 109-126. <https://doi.org/10.1002/jocb.135>
- Gules, H. K., & Bulbul, H. (2002). *Yenilikçilik: İşletmeler için stratejik rekabet aracı* [Innovation: A strategic competitive tool for businesses]. Nobel.
- Gumusluoglu, L., & İlsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473.
- Harris, A. (2003). Teacher leadership as distributed leadership: Heresy, fantasy or possibility. *School Leadership and Management*, 23(3), 313-324.
- Harrison, N. L. T. (2005). *The impact of distributed leadership on teachers* [Unpublished doctoral dissertation]. Indiana University.
- Hevesli, T. T. (2016). *Paylaşılan liderliğin değişime açıklık ve iç girişimcilik üzerine etkileri: Konya gençlik hizmetleri ve spor il müdürlüğünde bir araştırma* [The effects of shared leadership on openness to change and internal entrepreneurship: A study in Konya youth services and sports provincial directorate] [Unpublished master's thesis]. Konya Karatay University.
- Hoch J. E. (2013). Shared leadership and innovation: The role of vertical leadership and employee integrity. *Journal of Business and Psychology*, 28(2), 159-174.
- Hoegl, M & Muethel, M. (2007). Shared leadership in dispersed innovation teams: mutual influence and proactive followership. *Academy of management proceedings*, 2007(1), 1-9. <https://doi.org/10.5465/ambpp.2007.26530412>
- Jeong, Y. J., & Kim, M. J. (2014). The effects of shared leadership on team efficacy and team innovativeness. *The Korean Academic Association of Business Administration*, 27(5), 635-655.
- Kanter, R. M. (1982). The middle manager as innovator. *Harvard Business Review*, 60(4), 95-105.
- Khan, Z. A., Yasir, M., & Majid, A. (2019). Talent management practices, psychological empowerment and innovative work behavior: Moderating role of knowledge sharing. *City University Research Journal*, 9(3), 925-938.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. The Guilford Press.
- Knight-Turvey, N. (2006). Influencing employee innovation through structural empowerment initiatives: The need to feel empowered. In L. M. Gillin (Ed.), *The 3rd International Australian Graduate School of Entrepreneurship (AGSE) Research Exchange* (pp. 313-324). Swinburne University of Technology.
- Lee, S., Noh, Y., & Kang, E. (2018). A study on the effect of shared leadership to innovation behavior - the moderate effect of trust. *Journal of Digital Convergence*, 16(4), 69-77. <https://doi.org/10.14400/JDC.2018.16.4.069>
- Nodl, B. (2017). The Influence of leadership behavior on innovative work behavior: The case of a Pharmaceutical Company in Germany [Unpublished master's thesis]. University of Twente.
- Ogut, A., Aygen, S., & Demirsel M. T. (2007). Personel güçlendirme inovasyonu hızlandırır mı? Antalya ili beş yıldızlı konaklama işletmelerine yönelik gergül bir araştırma [Will staff empowerment accelerate innovation? An

empirical research on five-star accommodation establishments in Antalya province]. *Journal of Selcuk University Karaman Faculty of Economics and Administrative Sciences/ Selcuk Universitesi Karaman İktisadi ve İdari Bilimler Fakültesi Dergisi*, 2007(3), 163-172

- Onhon, O. (2016). *Türkiye’de telekomunikasyon sektöründe işyerlerindeki yenilikçilik iklimi ile çalışanların yenilik yapma davranışları arasındaki ilişki ve bu ilişkiye liderlik algılarının etkileri* [The effect of this relationship and the relationship between the perception of leadership behavior of employees to innovate and innovation in the workplace climate in the telecommunications sector in Turkey] [Unpublished doctoral thesis]. Marmara University.
- Ozer, N., & Beycioğlu, K. (2013). Paylaşılan liderlik ölçeğinin geliştirilmesi: Gecerlik ve güvenilirlik çalışmaları [Development of shared leadership scale: Validity and reliability studies]. *Elementary Education Online İlköğretim Online*, 12(1), 77-86
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Pearce, C.L., Conger, J.A., & Locke, E.A. (2008). Shared leadership theory. *The Leadership Quarterly*, 19(5), 622–628.
- Pierce, J.L., & Delbecq, A.L. (1977). Organization structure, individual attitudes and innovation. *Academy of Management Review*, 2(1), 27–37.
- Parzefall, M. R., Seeck, H., & Leppänen, A. (2008). Employee innovativeness in organizations: A review of the antecedents. *Finnish Journal of Business Economics*, 2(8), 165-182.
- Prabowo, R., Mustika, D.M., & Sjabadhyni, B. (2018). How a leader transforms employees’ psychological empowerment into innovative work behavior. *Psychological Research on Urban Society*, 1(2), 90-99.
- Sahin, A., & Caliskan S. (2018). Avantaj ve dezavantajlarıyla performans değerlendirme sistemi ve Türk kamu yönetiminde uygulanabilirliği [Performance evaluation system with its advantages and disadvantages and its applicability in Turkish public administration]. *Journal of Social Economic Research/ Sosyal Ekonomik Araştırmalar Dergisi*, 18(36), 114-130.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607.
- Sinha, S., Priyadarshi, P., & Kumar, P. (2016). Organizational culture, innovative behaviour and work related attitude: Role of psychological empowerment. *Journal of Workplace Learning*, 28(8), 519-535. <https://doi.org/10.1108/JWL-06-2016-0055>
- Spillane, J. P. (2006). *Distributed leadership*. Jossey-Bass.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher*, 30(3), 23-28. <https://doi.org/10.3102/0013189X030003023>
- Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.
- Sun, X., Jie, Y., Wang, Y., Xue, G., & Liu, Y. (2016). Shared leadership improves team novelty: The mechanism and its boundary condition. *Frontiers in psychology*, 7, 1-12. <https://doi.org/10.3389/fpsyg.2016.01964>
- Thurlings, M., Evers, A.T., & Vermeulen, M. (2015). Toward a model of explaining teachers’ innovative behavior: A literature review. *Review of Educational Research*, 85(3), 430-471. <https://doi.org/10.3102/0034654314557949>
- Tindowen, D. J. (2019). Influence of empowerment on teachers’ organizational behaviors. *European Journal of Educational Research*, 8(2), 617-631.
- Unsworth, K. L., & Parker, S. K. (2003). *Proactivity and innovation: Promoting a new workforce for the new workplace*, In T. Holman, T. D. Wall, C. W. Clegg, P. Sparrow & A. Howard (Eds.), *The New Workplace: A Guide to the Human Impact of Modern Work Practices* (pp. 175-96). Wiley.
- Van de Ven, A. (1986). Central problems in the management of innovation. *Management Science*, 32(5), 590-607.
- Weiss, C. H., & Cambone, J. (1994). Principals, shared decision making, and school reform. *Educational Evaluation and Policy Analysis*, 16(3), 287-301.
- Wood, M. S. (2005). Determinants of shared leadership in management teams. *International Journal of Leadership Studies*, 1(1), 64-85.
- Yukl, G. (2002). *Leadership in organizations* (5th ed.). Prentice-Hall.