



# JER

Osmangazi Journal of Educational Research

Volume 11(2), Fall 2024

RESEARCH

Open Access

**Suggested Citation:** Hiçyılmaz, Y., & Şahin, S. (2024). The role of learning organization and talent management in the effect of the transformational leadership styles of school principals in innovation management in their schools. *Osmangazi Journal of Educational Research*, 11(2), 58-81.

**Submitted:** 26/03/2024 **Revised:** 11/09/2024 **Accepted:** 24/12/2024 **DOI:** 10.59409/ojer.1459159

## The Role of Learning Organization and Talent Management in the Effect of the Transformational Leadership Styles of School Principals in Innovation Management in their Schools

\*Yasin Hiçyılmaz , \*\*Semiha Şahin 

**Abstract.** This research aims to examine the mediating role of learning organization and talent management in the impact of transformational leadership levels of school principals on innovation management according to the perceptions of teachers working in vocational and technical anatolian high schools. In accordance with the purpose and approach of the study, quantitative research method was used in the research. The sample consisted of 30 official vocational and technical anatolian high school principals and 562 teachers. The research data were collected with The Scale of Leadership Styles of School Principals, The Scale of Talent Management in Education, and The Scale of Learning Organization in Schools and The Scale of Innovation Management in Schools. Basic statistics and Structural Equation Modelling (Path diagram and fit indices) were used to analyze the data. The data gathered was analyzed with programs of SPSS 23.0 and AMOS. The research findings showed that there is a significant relationship between the transformational leadership styles of school principals and innovation management according to teacher perceptions, and that there is a partial mediating role of learning organization and talent management in this relationship. According to this, it can be concluded that school principals with a high level of transformational leadership will exhibit a higher level of innovation management characteristics in their schools with teachers with a high level of learning organization and talent management.

**Keywords.** Transformational, innovation, learning organization, talent.

\* Principal Ministry of Education, İzmir, Türkiye

e-mail: [yasinhicilyilmaz@gmail.com](mailto:yasinhicilyilmaz@gmail.com)

\*\* Prof. Dr., İzmir Dokuz Eylül University, Faculty of Education, İzmir, Türkiye

e-mail: [ssahin66@gmail.com](mailto:ssahin66@gmail.com)

**Note:** This article is presented from the doctoral dissertation.

In a rapidly changing world, organizational leadership is becoming more important and is considered a factor of success. Transformational leadership refers to leaders who are trying to generate ideas in organizations, gain new perspectives in providing a new path of development and progress to the organization (Korejan and Shahbazi, 2016). By developing decisiveness, passion and loyalty between leaders and employees, mobilizing employees and successfully bringing them together in new ways to move their performance to the top is emerging as the goal of this type of leadership. Transformational leadership actions enable organizations to improve their performance in complex and unpredictable environmental conditions (Eskandari, 2014). At the same time, many organizations today have to catch up with organizational changes and transformations in order to survive. In this process, the leadership style of the organization is of great importance (Mansurova and Güney, 2018). Learning organization is another key factor that takes the school to innovation. Learning means gathering new information and shaping the old knowledge. In this way it becomes easier for a school to adopt new changes. While adding data to the existing source, talented teachers also play an important role. Learning is a process that needs a talented look, search and synthesis. Talent makes this process more innovative. Talented teachers in the schools lead their schools to innovation with their qualified features. Innovation management, itself, changes the schools into a more complex source in terms of knowledge for both teachers and students. These four concepts, transformational leadership styles, talent management, learning organization and innovation management are seen to be studied individually in the literature.

In this research, it is tried to identify the variables that affect innovation management in schools, and the level of innovation of organizations is determined. In the studies in literature, it is observed that the relationship between innovation management and one or more variables has been analyzed. In addition, in some other studies, it has been found that transformational leadership has a positive effect on innovation management (Firat and Yeşil, 2020).

As can be understood from the pattern of this research, the relationship of transformational leadership styles of school principals with innovation management in schools is likely that an important part of the research was conducted on transformational leadership. The perspective of transformational leadership levels, individual and professional characteristics of managers have been tried to be determined. In another studies, the relationship of transformational leadership with different variables has been tried to be revealed (Buil, Martínez, and Matute 2018).

In a part of the research conducted on talent management, which is assumed to have a mediating role in this relationship, it was also tried to determine the level of talent management of school administrators, the perspective of their individual and professional characteristics (Gök, 2020). Excluding this study, the relationship between the talent management levels of school principals or managers with some variables has been determined (Pandita and Ray, 2018). Yerlikaya (2017) has tried to reveal the relationship of competencies to manage differences among teachers with talent management.

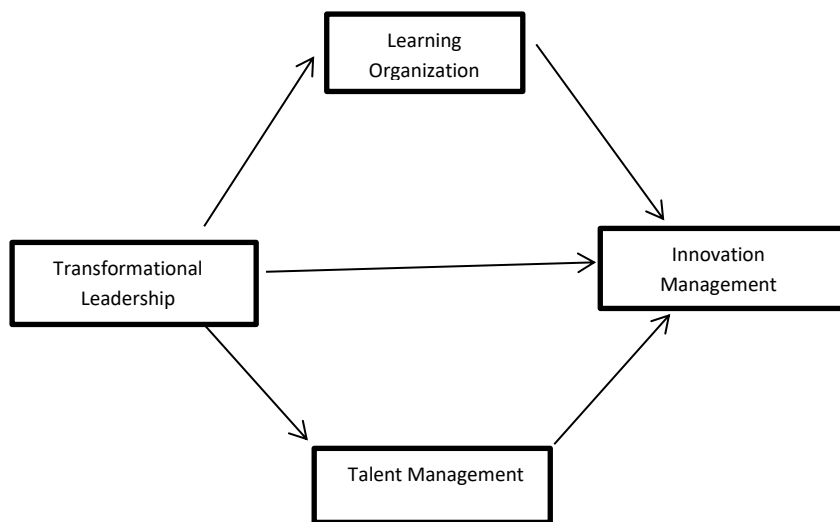
The second possible mediating variable of the research is the feature of schools as a learning organization. It is seen that in some of the studies conducted about this variable, the characteristics of schools as a learning organization have been tried to be determined. (Bil, 2018). According to the results of the research mentioned above; no research has been found to analyze whether talent management has a role on innovation management. Besides this, there is no research analyzing the effect of transformational leadership on innovation management. Similarly, no research has been found in the literature determining the mediating role of learning organization and talent management on innovation management. A modeling study using a combination of these four variables has not been observed. The variables are observed to be studied individually, and from this point, this research analyzing the relationship between these variables will be unique in the literature.

To fill this gap in the literature, it is aimed in this study to determine the mediating role of learning organization and talent management in the impact of transformational leadership styles of school principals on innovation management according to the perceptions of teachers working in vocational and technical anatolian high schools. In this aspect, this research can be said to have an original quality both in terms of its pattern and the literature. In order for innovation management, which is a very basic approach in schools today, to be realized in the proper way, some prerequisites are needed. One of them is the leadership approach adopted by the school principal. The most powerful aspect of the research is the identification of transformational school leaders who help develop a common idea about what is being done at school and why (Şahin, 2009; Saleh ve Khine, 2014), provide comprehensive educational opportunities (Bil, 2018; Albors-Garrigos, Igartua and Peiro, 2018), appreciate talent and performance (Yerlikaya, 2017; Ibrahim and Daniel, 2018) and see school as a means of integrating with the environment (Göl, 2012; Saadat and Saadat, 2016). In this research, it is predicted that transformational leadership affects innovation management both directly and indirectly through learning organization and talent management. Therefore, in this study, a structural model consisting of transformational leadership, talent management, learning organization

and innovation management was tested and for this purpose, data were collected from a total of 562 teachers and 30 school principals working at vocational and technical anatolian high school in Izmir.

### **Conceptual Framework**

In the conceptual framework of this research, researches examining the theoretical and experimental connection between transformational leadership, learning organization, talent management and innovation management were made use of (Bass, Avolio, Jung and Berson, 2003; Davies and Davies, 2010; Ibrahim and Daniel, 2018; Muñoz-Pascual, Curado and Galende, 2019). In the light of these past findings, this research represents an expert effort in terms of evidence to this growing knowledge, but it has the capacity to contribute to the current literature by investigating the experimental relationship between transformational leadership and innovation management and besides, it also explores the mediation role of learning organization and talent management in this interaction (Figure 1). Learning organization and talent management are two mediating variables that are included in the model in order to test the relationship between transformational leadership and innovation management. These two concepts are based on four ways in which transformational leadership can affect innovation management. It is believed that these ways can be used to evaluate the direct and indirect impact of transformational leadership on innovation management. The symbolic model of the research is shown in Figure 1.



*Figure 1. Conceptual Model of the Research.*

## **Innovation Management**

It can be realized with innovation that people reach new ideas by learning together. The process that includes shaping the strategic goals of an organization, developing innovations to achieve these goals, planning, directing, controlling and coordinating their implementation can be expressed as the innovation management process (Albors-Garrigos et al., 2018). Given a strong and developing focus on innovation, the human resource management of organizations also needs to review the skills of their employees. According to Meskó et al., in the next twenty years, 50% of the current professions will lose their validity. In addition to activating organizational learning, this causes human resources management to progress at a faster pace and to experience the mandatory requirements it faces in becoming suitable for practices and routines (Muñoz-Pascual et al., 2019).

In addition, it is important to reflect on the effects that innovation will have on the business and working world of the future. Besides this, the role of human resource management in supporting these changes should be carefully examined. Therefore, a deeper study of human resource management structures is required. It is necessary that routine activities are rethought, policies reviewed, new knowledge and skills are developed and that teams work in very different work environments than before (Jotabá, Fernandes, Gunkel and Kraus, 2022).

## **Transformational Leadership**

It is thought that transformational leadership practices carried out in this direction should support the new culture and, in particular, educators should assume the role of knowledge workers and knowledge leaders (Saleh and Khine, 2014).

While subordinates recognize the credibility of their leaders as charismatic transformational leaders and that they play a strategic and central role in achieving the goals of the organization, transformational leaders should be able to define and clearly articulate the vision of the organization. As well as this, transformational leaders should be able to balance the future visions of their subordinates by paying more attention to the needs of their subordinates than they do now. Transformational leaders should also be convincing their subordinates to perform tasks outside their areas of interest for the corporate benefit of the organization (Gunawan, 2020).

Wood (2019) suggests that one of the most important tasks of transformational leaders is to increase the engagement between leaders and their followers in terms of decency and values, as well as to increase the awareness of followers about existing problems and to provide them with support, encouragement and developmental experience. This positive increase in the relationship allows

leaders to focus on improving the ability of their followers to find creative solutions to problems. In doing so, it requires providing a roadmap for the future that inspires them, providing support for the challenges of change they must face, and finally increasing determination for effective task implementation.

### **Talent Management**

The success of organizations with higher performance depends primarily on the individual performance of employees, rather than the holistic meaning, and this basically depends on the capabilities and abilities of employees (Hongal, and Kinange 2020). Talented employees make a great contribution to the competitive advantage of their organizations by following the innovations in their fields and making the right decisions in achieving the goals. These people are people who stand out from others in terms of being ready and willing to improve themselves and learn new information by demonstrating the highest level of capacity with their immediate or long-term contribution to organizational performance (Fitzgerald, 2014; Ortlieb and Sieben, 2012).

Talent management can be seen as covering the career development of the human resource power of the organization and drawing boundaries without leaving the development roles of employees to the individuals themselves (Ibrahim and Daniel, 2018). If better talent can change the future of the business world, talent management should be given a major role in the organization. If the organization effectively implements talent management strategies, this helps to increase the commitment of the employee and, consequently, the performance of the organization. The higher the employee loyalty, the more the productivity (Hongal and Kinange, 2020).

### **Learning Organization**

Managing human power and making maximum use of this power is possible by providing continuity to learning. The relationship between learning and performance has generally been found to be positive (Saadat and Saadat, 2016). It is observed that the information and therefore the economic indicators of the organizations that are developing as learning organizations increase (Kim, Watkins and Lu, 2017).

Information has become a critical resource for various organizations in the competitive business environment in recent years. In the field of modern management, organizational learning is proposed as a strategic tool for seizing competitive advantage and maintaining organizational success (Saadat and Saadat, 2016). The purpose of learning is not only to improve the knowledge and skills of the

employee, but also to improve organizational development and to create a flexible, dynamic and learning organizational structure (Saadat and Saadat, 2016).

People can reach new ideas by learning together with innovation. The process that includes shaping the strategic goals of an organization, developing innovations to achieve these goals, planning, directing, controlling and coordinating their implementation can be expressed as the innovation management process (Albors-Garrigos et al., 2018).

In the research conducted to determine the effects of innovation management on school performance, transformational leadership and organizational learning were evaluated as factors of innovation management and it was found that these two variables affect innovation management (Sitthisomjin, Somprach and Phuseeorn, 2018). In the study conducted to determine the relationship between managers' perception of transformational leadership and employees' talent management, it was observed that there is a strong relationship between these two variables. (Durrani, 2018).

### **Method**

This study was carried out by using the relational screening model, one of the quantitative research methods. In quantitative approaches, phenomena are objectified by abstracting them from the processes and factors around them, and then transformed into properties that can be observed and measured. It is assumed that in this way, through accurate measurements and careful digitizations, the truth can be identified and understood (Erdoğan, 2003). In relational screening models, the presence and/or degree of change between two or more variables is tested (Karasar, 2016). There are four variables in the study, one independent, one dependent and two intermediary variables. Transformational leadership as an independent variable, innovation management as a dependent variable and learning organization and talent management as intermediary variables were used in the research. According to the perceptions of teachers working in vocational and technical Anatolian high schools, the theoretical model developed to determine the mediating role of learning organization and talent management in the impact of transformational leadership styles of school principals on innovation management is tested in the research. The test process of the model was carried out with the structural equation model and path analysis. The structural equation model is basically a combination of factor analysis and regression analysis and is a theoretical structure represented by hidden variables (Hox and Bechger, 1995).

## **Research Model**

The current research investigates the mediating role of learning organization and talent management in the impact of transformational leadership levels of school principals on innovation management according to the perceptions of teachers working in vocational and technical Anatolian high schools in the central 11 districts of Izmir province. In the research, a relational screening model is used.

## **Study Group**

The population of the study consists of school principals and 4870 teachers working in 73 vocational and technical anatolian high schools located in these districts. Due to the differences in the number of schools and teachers in the central districts of Izmir, each district was included in the sampling. The schools in the districts were determined by simple random sampling method (Yazıcıoğlu and Erdoğan, 2004). In the sample, 30 public vocational and technical anatolian high school principals and 562 teachers were included. They work in the central 11 districts of Izmir. After stratification, equal proportions of samples were selected from each layer by simple random method (Kılıç, 2013).

## **Data Collection Tools**

In the study, the “The Scale of Leadership Styles of School Principals” developed by Şahin (2003) and revised by Şahin (2009) was used to measure the transformational leadership levels of school principals according to teachers' perceptions. The Cronbach Alpha Coefficient of the scale is calculated as .65 for the first sub-dimension, as .59 for the second sub-dimension and as .95 in total.

In the study, the “The Scale of Learning Organization in Schools” developed by Bil (2018) was used to measure the level of learning organization of school principals according to teachers' perceptions. Cronbach Alpha reliability coefficients is calculated, respectively, as .97 for the sub-dimension of Managing Learning, as .78 for the sub-dimension of Learning Opportunities and as .96 in total (Bil, 2018).

In the study, “The Scale of Talent Management in Education” developed by Yerlikaya (2017) was used to measure the talent management levels of school principals according to teachers' perceptions. Cronbach's Alpha internal consistency coefficient was calculated to determine the reliability of the scale. Cronbach Alpha reliability coefficients is calculated, respectively, as .92 for the sub-dimension of Goals and Talent Development, as .90 for the sub-dimension of Performance



Evaluation and Retention of Talent and as .94 in total. When the reliability levels of the total and sub-dimensions of the scale are examined, it is understood that The Scale of Talent Management in Education used in this research is reliable (Yerlikaya, 2017).

In the study, the “The Scale of Innovation Management in Schools” developed by Bülbül (2011) was used to measure the level of innovation management of school principals according to teachers' perceptions. Exploratory and confirmatory factor analysis were applied to determine the construct validity of the scale. Internal consistency coefficients of the sub-dimensions of the scale are .88 for Input Management, .93 for Innovation Strategy, .87 for Organizational Culture and Structure and .96 for Project Management. The Cronbach Alpha internal consistency coefficient for the entire scale was calculated as 0.98. According to these coefficients, it can be said that the reliability of the scale is high (Göl, 2012).

### **Process**

The population of the study consists of school principals and 4870 teachers working in 73 vocational and technical Anatolian high schools located in these districts. While determining the sample of the research, it was thought that it would represent the population. First of all, due to the differences in the number of schools and teachers in the central districts of Izmir, each district was included in the sampling. The schools in the districts were determined by simple random sampling method (Yazıcıoğlu and Erdoğan, 2004).

The data collection was carried out both by visiting schools individually and via googleform. In order to collect data and apply measurement tools, permission to conduct a survey was obtained from the Izmir Provincial Directorate of National Education with the permission of the Ethics Committee from the Directorate of the Institute of Educational Sciences of Dokuz Eylul University. The scales, together with the permission letter received from the Izmir Provincial Directorate of National Education, were delivered to the schools where the research will be conducted, the administrators were interviewed, and explanations of the measurement tool were made to the teachers and volunteer teachers were allowed to participate in the research. The teacher who requested it filled out the measurement tool manually, and the teacher who requested it participated in the study via googleform, where the form was submitted online by the researcher. In the 2018-2019 academic year, 572 scales were returned from the scale applied to 2433 teachers working in a total of 35 public vocational and technical anatolian high schools located in 11 districts of Izmir province. However, 5

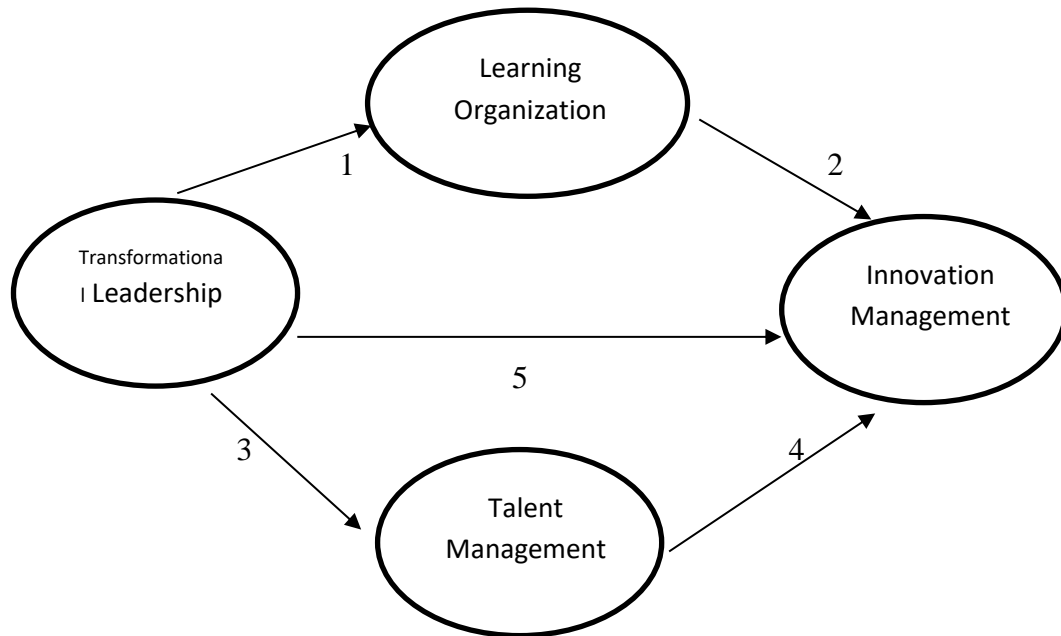
schools and 10 scales were removed from these due to insufficient data, incomplete or incorrect answers, and a total of 30 schools and 562 scales were taken into consideration.

## **Data Analysis**

SPSS 23.0 and SPSS Amos23.0 programs were used for the identification and analysis of the data. Descriptive statistics (frequency and percentage) were used in the analysis process while calculations based on demographic variables (branch, number of in-service trainings for teachers, number of documents received, gender for principals, educational management education status and union membership status) were made. According to teachers' perceptions, structural equation modeling (AMOS) was applied to determine whether there is a mediating role of learning organization and talent management in the relationship between transformational leadership and innovation management of school principals. The Structural Equation Modeling is an effective tool to examine the relationship between multiple variables and to reveal the harmony of the scale model. According to the Structural Equation model, the  $\chi^2/sd$  ratio's being less than 3.0, the RMSEA ratio's being equal to or less than .08 and the CFI value's being greater than .95 show the proof that there is an acceptable model fit (Hu and Bentler, 1999). In addition, the bootstrapping method was used to calculate the direct, indirect and total effects of the variables in the model. The bootstrapping method was used to estimate the direct and indirect effect of the external variable on the internal source variable (Hayes, 2018). The path coefficients obtained in the modeling established in determining the relationships between the research variables were examined. Path diagrams and fit indices were used in the construction of the Structural Equation Model. This analysis is a technique that allows to estimate the magnitude and significance of the assumed causal relationships between two or more variables (Asher, 2013).

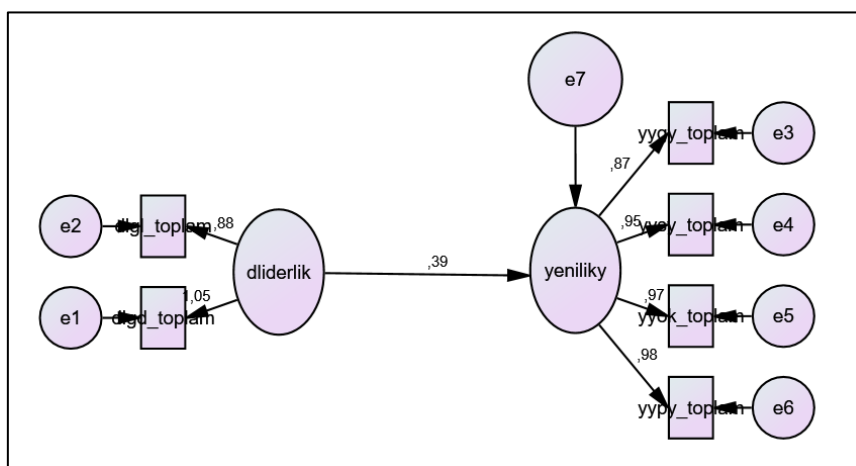
## **Findings**

The findings are presented below. The effect of the independent variable on the intermediary variables was examined decisively (1<sup>st</sup> and 3<sup>rd</sup> path in Frame 2). Then, the relationship of the independent variable with the dependent variable was examined (5<sup>th</sup> path in Frame 2). If the results are significant in these two cases, the independent variable and the intermediary variables are analyzed together and the effect on the dependent variable is observed (The Total of 1<sup>st</sup> and 2<sup>nd</sup> path and 3<sup>rd</sup> and 4<sup>th</sup> path in Frame 2). If the influence of the independent variable on the dependent variable has disappeared or weakened, it is assumed that the variables in the established model perform the mediating role (Baron ve Keny, 1986).



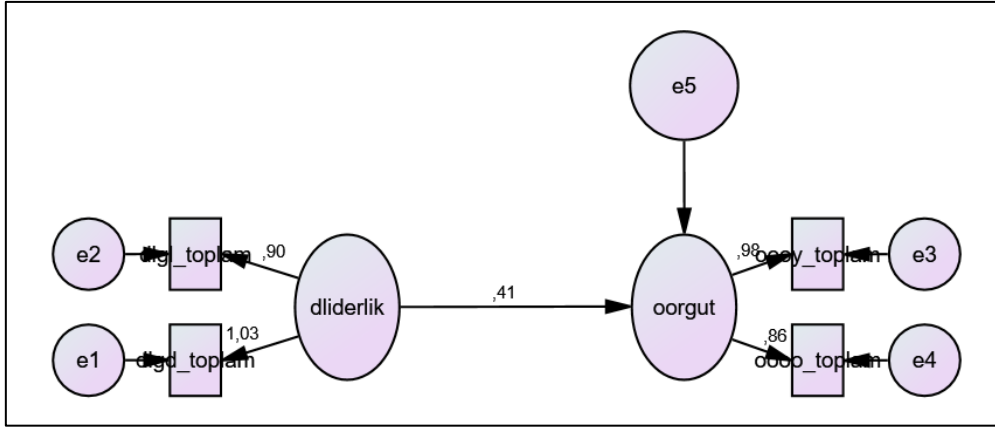
Frame 2. Scheme of Relationship between Variables (The Mediating Role of Learning Organization and Talent Management).

In order to determine the mediation role of learning organization and talent management, mediation test was applied in structural equation modeling. When conducting this analysis, the condition is sought that the compliance goodness values of the established model are at an acceptable level. When the required level of goodness of fit is achieved, firstly, the path showing the effect of the independent variable on the dependent variable (Model 1) was tested.

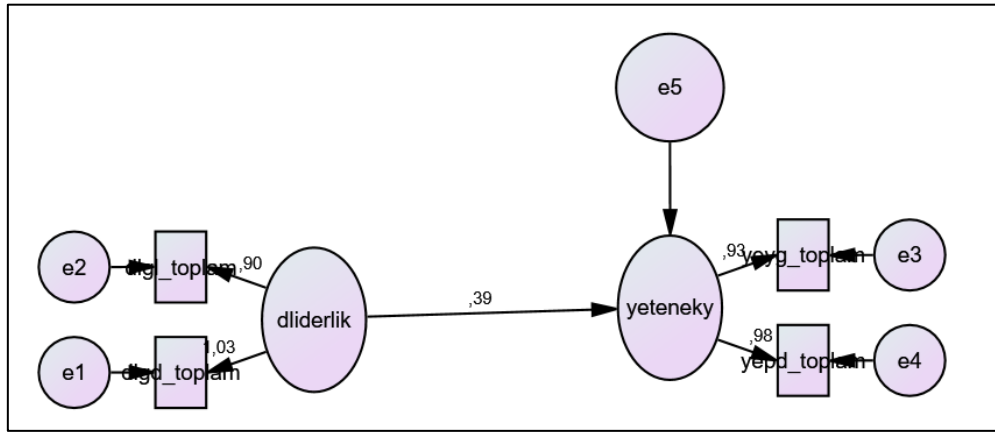


Model 1

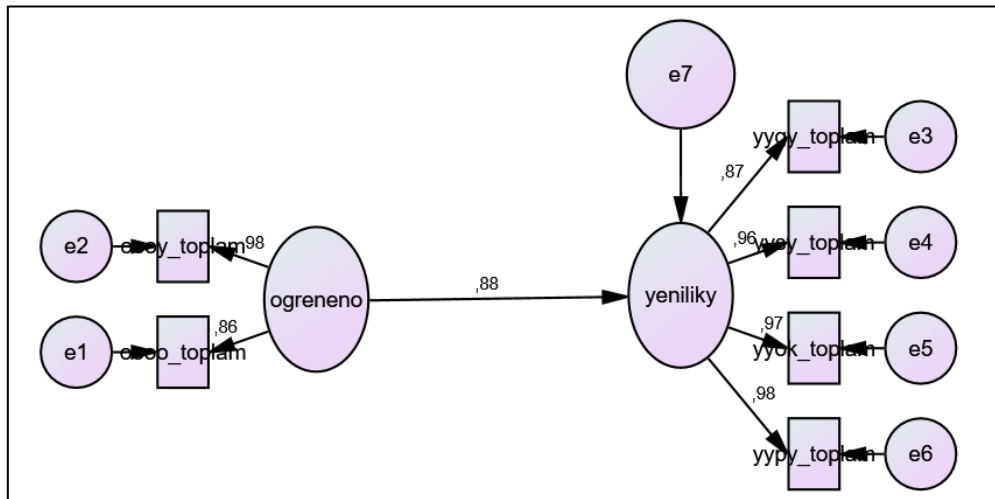
In the next stage, the paths from the independent variable to the intermediate variables (Model 2 and Model 3) and from the intermediate variables to the dependent variable (Model 4 and Model 5) were tested.



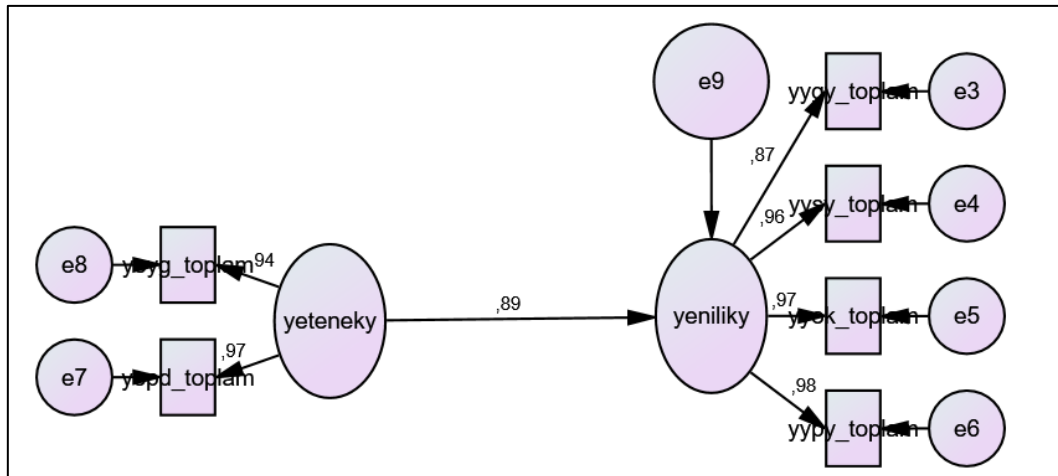
Model 2



Model 3

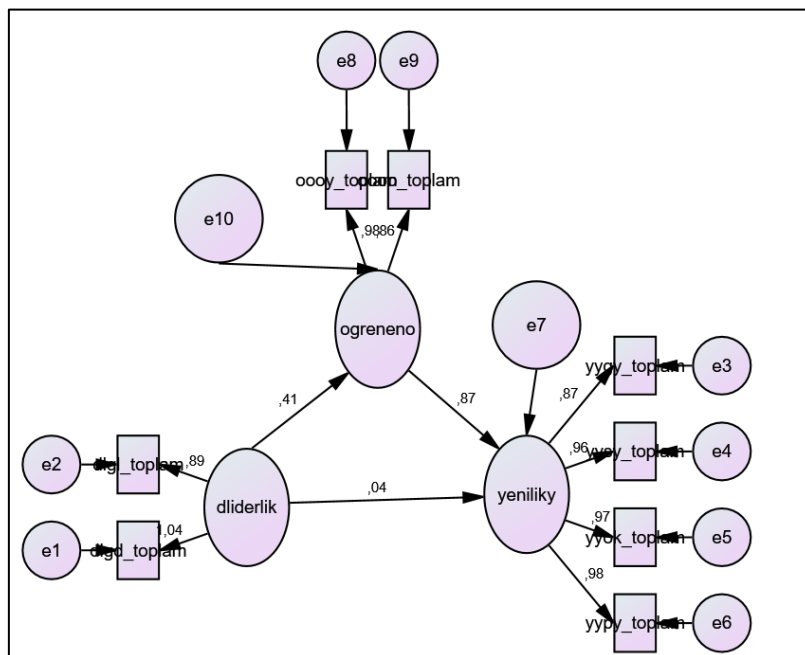


Model 4

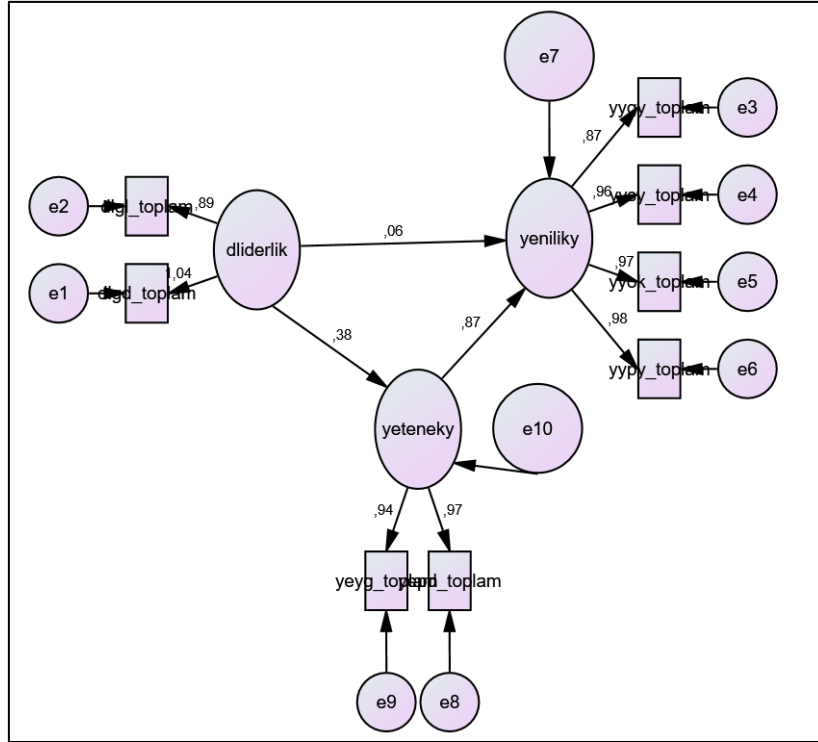


Model 5

In the next stage, the models containing the paths from the independent variable to the intermediate variables and from the intermediate variables to the dependent variable together with the models in which the path from the independent variable to the dependent variable were first tested separately (Model 6 and Model 7).

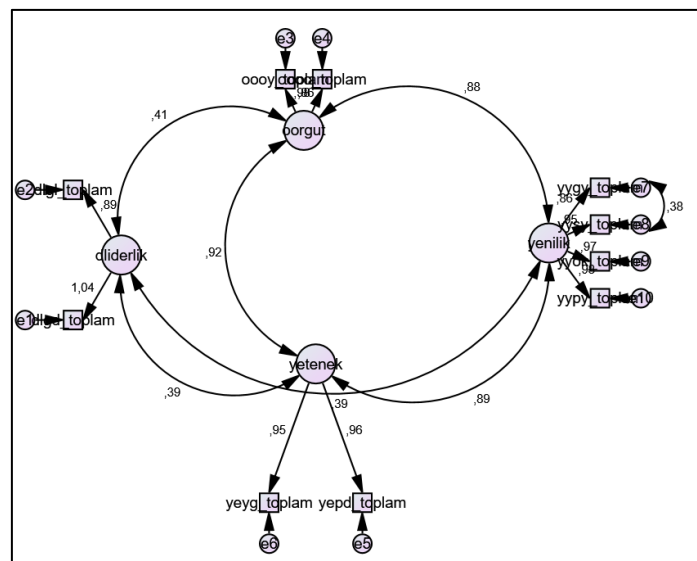


Model 6



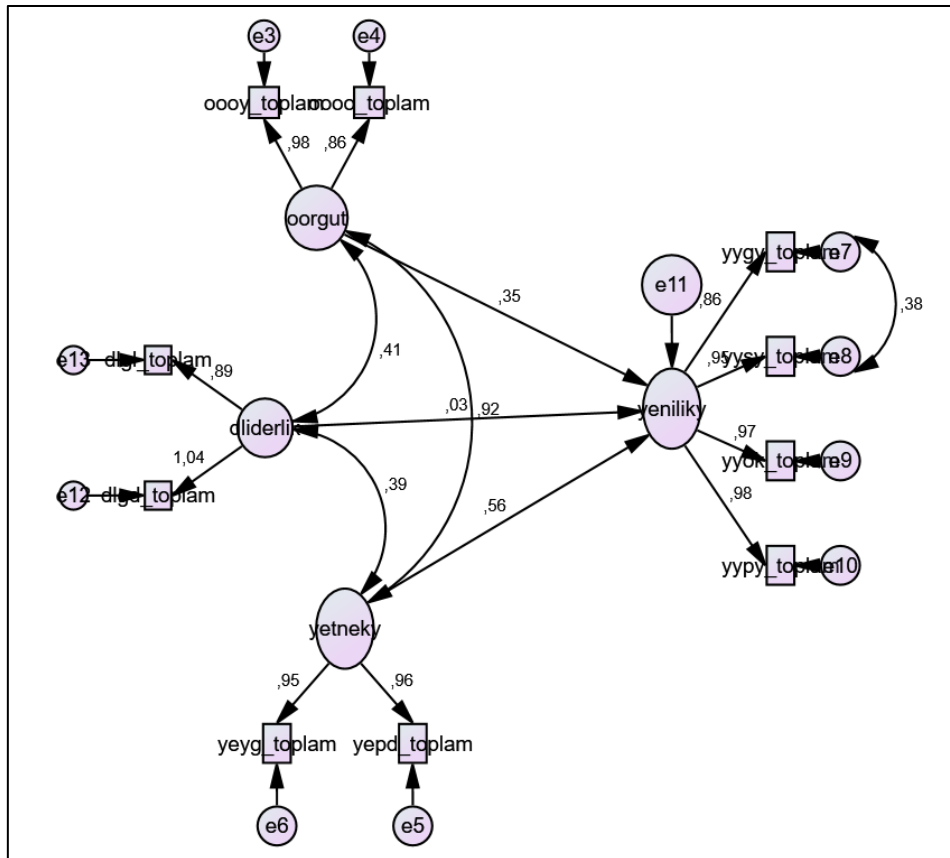
Model 7

Confirmatory factor analysis of the model was performed before the model in which the dependent variable, independent variable and intermediary variables were all tested. In order to ensure acceptable fit indices values, covariance was established between the two sub-dimensions of innovation management, the dependent variable, input management and innovation strategy and the model (Model 8), in which there are also two intermediate variables, was tested.



Model 8

It is essential that the best fit indices values are obtained from “the paths from independent variable to dependent variable and from intermediary variable to dependent variable” to be able to decide on the intermediary effect, and it is necessary that path coefficients between “independent variable and dependent variable” decrease or lose their effects totally when Model 6 and Model 7 are compared to Model 1 (Şimşek, 2001).



Model 9

It is seen that learning organization and talent management may have an intermediary effect between transformational leadership, which is an independent variable, and innovation management, which is a dependent variable due to the fact that the findings obtained in Model 9 meet the expectation of path coefficients. The fit indices values that are important in the mediation effect are given in Table 1 and the fit indices values related to the mediation test of the model are given in Table 2.

Table 1.

*Limitation of Model Fit Criteria*

<b>Fit Criteria</b>	<b>Perfect Fit</b>	<b>Acceptable Fit</b>
$\chi^2/sd$	$\leq 3$	$\leq 5$
RMSEA	$0 < RMSEA < 0.05$	$0.05 \leq RMSEA \leq 0.10$
NFI	$0.95 \leq NFI \leq 1$	$0.90 \leq NFI \leq 0.95$
CFI	$0.95 \leq CFI \leq 1$	$0.90 \leq CFI \leq 0.95$
GFI	$0.95 \leq GFI \leq 1$	$0.90 \leq GFI \leq 0.95$
AGFI	$0.90 \leq AGFI \leq 1$	$0.85 \leq AGFI \leq 0.90$

Resource: Schermelleh-Engel, Moosbrugger and Müller, 2003.

Table 2.

*Fit Indices Related to the Mediation Test of Learning Organization and Talent Management*

<b>Fit Criteria</b>	<b>X<sup>2</sup></b>	<b>Sd</b>	<b>P</b>	<b>X<sup>2</sup>/sd</b>	<b>AGFI</b>	<b>GFI</b>	<b>CFI</b>	<b>NFI</b>	<b>RMSEA</b>
Model 9	121.01	28	.000	4.32	.917	.958	.989	.986	.077

Model meaningful:  $p < 0.01$

Model fit:  $X^2 / sd < 5.0$

As can be seen in Table 1 and Table 2, it has been tested that the structural equation modeling performed to decide on the mediating effect of learning organization and talent management on the impact of transformational leadership on innovation management has the expected values. In this context, firstly, the analysis results of the model created to determine whether the relationship between transformational leadership and innovation management is meaningful show that the model is meaningful. After it was seen that there is a significant relationship between transformational leadership and innovation management, transformational leadership is independent, innovation management is dependent, and learning organization and talent management are taken as intermediary variables in the model created. The fit indices obtained as a result of the test show that the model is within acceptable limits ( $X^2=121,01$   $sd=28$ ,  $X^2/sd=4,32$ ,  $AGFI=.92$ ,  $GFI=.96$ ,  $CFI=.99$ ,  $NFI=.99$   $RMSEA=0,077$ ).

### **Discussion and Conclusion**

In the literature, it is seen that researchers have examined the effect of transformational leadership on innovation management. Sosik, Kahai and Avolio (1998) suggested that transformational leaders encourage creative thoughts that increase innovation within the organization



and found that transformational leadership positively and significantly affects the organization's tendency to innovation. This shows consistency with the researchers conducted by Mokhber, Vakilbashi and Ismail (2015), who found that transformational leadership has a positive and important effect on organizational innovation, by Jung et al., who found that there is a positive and important relationship between the innovation of the company and transformational leadership and by Hussain, Talib and Shah (2015). A positive, meaningful relationship at an intermediate level has been found between transformational leadership and the level of learning organization of schools in the research conducted by Safia (2020) determining the relationship between transformational leadership roles of secondary school principals and schools being a learning organization and teachers' job satisfaction levels. Transformational leadership allows individuals to create a collaborative culture in the organization that encourages teacher development, learning together, and problem solving (Hargreaves and Fink, 2006). In a study conducted by Yıldız (2019) in which the effect of transformational leadership behaviors of school administrators on teachers' perceptions of individual innovation was examined, it was found that inspiring motivation and intellectual stimulation sub-dimensions of transformational leadership predict teachers' level of innovation positively and significantly. In a study conducted by in which the role of positive psychological capital in the relationship between transformational leadership characteristics and innovation management competence of school administrators was examined a significant and high-level positive relationship was found between the transformational leadership characteristics of school principals and their competencies in innovation management. In the research conducted by Yoldaş (2019), stating the relationship between teachers' perceptions of learning organization and their attitudes towards change, it was observed that there is a positive and strong relationship between teachers' perception of learning organization and their attitudes towards change. In the research conducted by Durrani (2018) to determine the relationship between the transformational leadership approaches of managers and the talent management of employees, a strong relationship was found between managers' perception of transformational leadership and employees' talent management. In addition, the findings obtained in the study coincide with the findings of the study conducted by Esen (2016). In this research, the relationship between the leadership styles of school principals and innovation management according to the perceptions of preschool teachers was analyzed and it was concluded that there is a statistically significant positive relationship between the leadership styles of school principals and the average score of innovation management. From the point of my view, the principals with transformational leadership features who set long term aims for their schools are more likely to

new ideas, thoughts, changes and instructions. They are eager and brave to make new arrangements for their students, teachers and the schools. While making these new applications, they make all the partners participate in the decision. In this way their leadership styles directly affects the new regulations in a positive way.

The relationships detected between all these variables confirm the model that expresses the affect of transformational leadership to innovation management directly and indirectly through the learning organization and talent management suggested in the research. The findings reveal that there is a positive significant relationship between the transformational leadership levels of school principals and innovation management levels according to teacher perceptions. After the inclusion of the characteristics of schools as learning organizations and talent management variables in the model, the effect of transformational leadership levels on innovation management weakens, but still makes sense. This indicates that the characteristics of schools as a learning organization and talent management are partial intermediary variables in this relationship. In other words, it can be stated that the perceived transformational leadership levels of school principals, according to teachers, have a positive impact on innovation management through the learning organization of schools and talent management. This means that if teachers are motivated to learn themselves and their talents are rewarded and promoted by their school principals, innovations are possible. The principal sets a vision and mission for their schools. In order to accomplish this, new applications are needed. The talented teachers and teachers having desire for learning make this innovation process easier. Namely, if innovation is needed in the school, learning and talent are inevitable. According to teacher perceptions, as the transformational leadership levels of school principals' increase, the innovation management levels, the learning organization and talent management levels of their schools increase. At this point, it can be concluded that principals should form their schools according to the conditions of future. The needs and opportunities of the school should be revised by the principal and the teachers. With this data, it can be said that transformational leadership styles are the starting and triggering factor. Once the principals have these features, they can make their schools a learning organization. They can find, benefit and evaluate the talented teachers. After all this, the principals can prepare an environment in which innovation is promoted and sustained.

The increase in the level of learning organization and talent management of teachers' schools also positively affects the perceptions of innovation management towards school principals. It can be argued that school principals with a high level of transformational leadership exhibit a higher level of innovation management characteristics in their schools with teachers with a high level of learning

organization and talent management. As mentioned above, these four variables are related to each other, and an increase or decrease in one of them affects the other ones. Teachers who are determined and open to learning new things and who are interested in improving their talents and skills tend to be more positive in accomplishing innovation in their schools. Therefore, if innovation is to be realized in schools, transformational principals should benefit from talented teachers with learning capabilities.

### **Recommendations**

Researchers can conduct new studies qualitatively with a different sample, using demographic variables and a research pattern. In the light of the findings obtained, policy developers may make the administration in public schools a professional and academic field. It is also recommended to do the research in other types of schools in other parts of the city and other cities as well. Besides this, the research includes only the public schools and the data was obtained only from these schools. Private sector could be included in the following studies. Namely, teachers and principals working in private schools may contribute to the data. The research data were obtained quantitatively, to have a deeper analysis of how school principals' transformational leadership styles lead to innovation management, a qualitative research method can be used in the further studies.

## **About Authors**

---

**First Author:** Yasin Hiçyılmaz is a principal at Ministry of Education in İzmir, Türkiye.

**Second Author:** Semiha Şahin is a member of Dokuz Eylül University. She works at Educational Sciences Department, Faculty of Education.

## **Conflict of Interest**

The authors declare that there is no conflict of interest. The authors contributed equally to the study.

## **Funding**

"No funding was received."

## **Ethical Standards**

Data were collected with the permission of the scale owners. However, volunteer teachers working in public schools participated in the research.

## **ORCID**

*Yasin Hiçyılmaz*  <https://orcid.org/0000-0002-1036-9878>

*Semiha Şahin*  <https://orcid.org/0000-0002-1135-0327>

---

## References

- Albors-Garrigos, J., Igartua, J. I., & Peiro, A. (2018). Innovation management techniques and tools: Its impact on firm innovation performance. *International Journal of Innovation Management*, 22(6), 1-31.
- Ameen, A., & Ahmad, K. (2013). A conceptual framework of financial information systems to reduce corruption. *Journal of Theoretical and Applied Information Technology*, 54(1), 59-72.
- Bass, B. M. (2000). The future of leadership in learning organizations. *The Journal of Leadership Studies*, 7(3), 18-40.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88, 207-218.
- Bil, E. (2018). *Ortaöğretim okullarının öğrenen örgüt, örgütsel güven ve iş doyumu düzeyleri arasındaki ilişki* [Doctoral dissertation, Ankara Üniversitesi Eğitim Bilimleri Enstitüsü].
- Buil, I., Martínez, E., & Matute, J. (2019). Transformational Leadership and Employee Performance: The Role of Identification, Engagement and Proactive Personality. *International Journal of Hospitality Management*, 77, 64-75. <https://doi.org/10.1016/j.ijhm.2018.06.014>
- Bülbül, T. (2011). Okullarda yenilik yönetimi ölçeği'nin geliştirilmesi: Geçerlik ve güvenilirlik çalışması. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*, 12(1), 89-105.
- Damirch, Q., Rahimi, G., & Seyyedi, M. (2011). Transformational leadership style and innovative behavior on innovative climate at SMEs in Iran. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(4), 119-127.
- Davies, B., & Davies, B. J. (2010). Talent management in academies. *International Journal of Educational Management*, 24(5), 418-426. <https://doi.org/10.1108/09513541011055983>
- Durrani, S. K. (2018). *Yöneticilerin dönüşümcü liderlik yaklaşımları ile çalışanların yetenek yönetimi arasındaki ilişkinin belirlenmesine yönelik bir alan araştırması* [Unpublished Master's thesis, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü].
- Erdoğan, İ. (2003). *Pozitivist metodoloji: Bilimsel araştırma tasarımı, istatistiksel yöntemler, analiz ve yorum*. ERK.
- Esen, F. (2016). Okul öncesi eğitim öğretmenlerinin algılarına göre okul müdürlerinin liderlik stilleri ile yenilik yönetimi arasındaki ilişki. [Master's thesis, Aydın Üniversitesi Sosyal Bilimler Enstitüsü].
- Eskandari, M. (2014). Analysis and critique of transformational leadership theory. *Two Islam and Management Scientific-Specialist Journals*, 3(5), 123-145.
- Fırat, İ., & Yeşil, S. (2020). Dönüşümcü liderlik özelliklerinin işletmenin yenilik yeteneği ve performansı üzerindeki etkisi. *Beykent Üniversitesi Sosyal Bilimler Dergisi*, 13(2), 40-57.
- Fitzgerald, M. (2014). Talent and talent management insights. *NHS Leadership Academy*. [www.leadershipacademy.nhs.uk](http://www.leadershipacademy.nhs.uk)
- Göl, E. (2012). İlköğretim okul yöneticilerinin yenilik yönetimi yeterliklerine ilişkin öğretmen algıları: Kırklareli ili örneği. [Master's thesis, Trakya Üniversitesi Sosyal Bilimler Enstitüsü].

- Gunawan, G. (2020). The influence of transformational leadership, school culture, and work motivation on school effectiveness in junior high school in Medan. *Budapest International Research Critics Institute*, 3, 625–634.
- Hallinger, P. (2011). A review of three decades of doctoral studies using the principal instructional management rating scale: A lens on methodological progress in educational leadership. *Educational Administration Quarterly*, 47(2), 271–306.
- Hargreaves, A., & Fink, D. (2006). Redistributed leadership for sustainable professional learning communities. *Journal of School Leadership*, 16(5), 550–565.
- Hartley, J. (2005). Innovation in governance and public services: Past and present. *Journal Name*, Volume(Issue), Pages. (Note: Please insert the journal's name, volume, issue, and page range if available)
- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40.
- Hirtz, P. D., Murray, S. L., & Riordan, C. A. (2007). The effects of leadership on quality. *Engineering Management Journal*, 19(1), 22–30.
- Hongal, P., & Kinange, U. (2020). A study on talent management and its impact on organization performance: An empirical review. *International Journal of Engineering and Management Research*, 10(1), 8. <https://doi.org/xx.xxx/yyyy>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Hussain, H. K., Talib, N. A., & Shah, I. M. (2015). Application of structural equation modeling to evaluate relationship between dimensions of transformational leadership and organizational innovation: In Iraq public universities. *Global Journal of Business and Social Science Review*, 1(1), 107–115.
- Ibrahim, A. U., & Daniel, C. O. (2018). Talent management and its effects on the competitive advantage in organizations. *International Journal of Recent Advances in Multidisciplinary Research*, 5(11), 4247–4253.
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2018). Factors determining user satisfaction of internet usage among public sector employees in Yemen. *International Journal of Technological Learning, Innovation and Development*, 10(1), 37–68.
- Janssen, O., Van de Vliert, E., & West, M. (2004). The bright and dark sides of individual and group innovation: A special issue introduction. *Journal of Organizational Behavior*, 25(1), 129–145.
- Jotabá, M. N., Fernandes, C. I., Gunkel, M., & Kraus, S. (2022). Innovation and human resource management: A systematic literature review. *European Journal of Innovation Management*, 25(6), 1–18. <https://doi.org/10.1108/EJIM-07-2021-0330>
- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadership Quarterly*, 14, 525–544.
- Karabağ Köse, E. (2013). İlköğretim kurumu öğretmenlerine göre okul yöneticilerinin liderlik stilleri ile örgütsel öğrenme arasındaki ilişkide örgütsel sessizlik ve karara katılımın aracı etkisi. [Unpublished doctoral dissertation, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü].
- Karasar, N. (2016). *Bilimsel araştırma yöntemi* (30th ed.). Nobel Yayınları.
- Kılıç, S. (2013). Örneklemeye yöntemleri. *Journal of Mood Disorders*, 3(1), 44–46.

- Kim, K., Watkins, K., & Lu, Z. (2017). The impact of a learning organization on performance: Focusing on knowledge performance and financial performance. *European Journal of Training and Development*, 41, 177-193.
- Korejan, M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of Fundamental and Applied Sciences*, 8, 452-465.
- Liu, S., Hallinger, P., & Feng, D. (2016). Supporting the professional learning of teachers in China: Does principal leadership make a difference? *Teaching and Teacher Education*, 59, 79-91.
- Makri, M., & Scandura, T. (2010). Exploring the effects of creative CEO leadership on innovation in high-technology firms. *Leadership Quarterly*, 21(1), 75-88.
- Mansurova, S., & Güney, S. (2018). İşletmelerde dönüşümcü liderlik davranışlarının örgüt kültürüne etkisi ve bir uygulama. *ABMYO Dergisi*, 13(52), 33-54.
- Mohamed, M. S., Khalifa, G. S. A., Nusari, M., Ameen, A., Al-Shibami, A. H., & Abuelhassan, A. E. (2018). Effect of organizational excellence and employee performance on organizational productivity within healthcare sector in the UAE. *Journal of Engineering and Applied Sciences*, 13(15), 6199–6210.
- Mokhber, M., Vakilbashi, A., & Ismail, W. K. bin W. (2015). Effect of transformational leadership and its components on organizational innovation. *Iranian Journal of Management Studies*, 8(2), 221-241.
- Muñoz-Pascual, L., Curado, C., & Galende, J. (2019). The Triple Bottom Line on sustainable product innovation performance in SMEs: A mixed methods approach. *Sustainability*, 11, 1689.
- Nusair, N., Ababneh, R., & Bae, Y. K. (2012). The impact of transformational leadership style on innovation as perceived by public employees in Jordan. *International Journal of Commerce and Management*, 22(3), 182-201.
- Ortlieb, R., & Sieben, B. (2012). How to safeguard critical resources of professional and managerial staff: Exploration of a taxonomy of resource retention strategies. *The International Journal of Human Resource Management*, 23(8), 1688-1704.
- Pandita, D., & Ray, S. (2018). Talent management and employee engagement: A meta-analysis of their impact on talent retention. *Industrial and Commercial Training*, 50(4), 85-199. <https://doi.org/10.1108/ICT-09-2017-0073>
- Piyaman, P., Hallinger, P., & Viseshsiri, P. (2017). Addressing the achievement gap: Exploring principal leadership and teacher professional learning in urban and rural primary schools in Thailand. *Journal of Educational Administration*, 55(6), 717-734.
- Rahimi, G., Damirchi, G. V., & Seyyedi, M. H. (2011). Surveying of organizational culture and management behavior affect in organizational innovation: Case study: Agriculture organization of Eastern Azerbaijan in Iran. *World Applied Sciences Journal*, 14(11), 1763-1769.
- Saadat, V., & Saadat, Z. (2016). Organizational learning as a key role of organizational success. *Proceedings of the 3rd International Conference on New Challenges in Management and Organization: Organization and Leadership*, 2 May 2016, Dubai, UAE.
- Safia, M. (2020). Öğretmenlerin algılarına göre ortaokul müdürlerinin dönüşümcü liderlik rolleri ile okulların öğrenen örgüt olma ve öğretmenlerin iş tatmini düzeyleri arasındaki ilişkinin incelenmesi. [Unpublished master's thesis]. Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü, Erzurum, Turkey.

- Saleh, I. M., & Khine, M. S. (2014). *New school culture and effectiveness in schools: Reframing transformational leadership*. Rotterdam: Sense Publishers.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Sitthisomjin, J., Somprach, K., & Phuseorn, S. (2018). The effects of innovation management on school performance of secondary schools in Thailand. *Kasetsart Journal of Social Sciences*, 41(1), 34-39.
- Sosik, J. J., Kahai, S. S., & Avolio, B. J. (1998). Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups. *Creativity Research Journal*, 11(2), 111-121.
- Şahin, S. (2004). Okul müdürlerinin dönüştürücü ve sürdürücü liderlik stilleri ile okul kültürü arasındaki ilişkiler: İzmir ili örneği. *Kuram ve Uygulamada Eğitim Bilimleri*, 4(2), 365-396.
- Şahin, S. (2009). Okul müdürlerinin dönüştürücü ve sürdürücü liderlik stilleri ölçeğinin revizyon çalışması. *Araştırma Raporu*, İzmir, Turkey.
- Şahin, Ö. (2015). Yetenek yönetimi ve yenilik performansı ilişkisi: Konaklama işletmelerinde bir araştırma. [Unpublished master's thesis]. Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü, Aydın, Turkey.
- Şimşek, Ş. (2001). *Yönetim ve organizasyon* (6th ed.). Konya: Günay Ofset.
- Wood, T. B. (2019). An examination of the suitability of transactional, transformational, and situational leadership theories in evaluating the role of gender in determining the leadership style: A comparison and contrast of three leadership theories. *American Journal of Management Studies*, 4, 2-11.
- Yazıcıoğlu, Y., & Erdoğan, S. (2004). *SPSS uygulamalı bilimsel araştırma yöntemleri*. Ankara: Detay Yayıncılık.
- Yerlikaya, S. (2017). Okul yöneticilerinin yetenek yönetimi ile öğretmenler arasındaki farklılıkları yönetme yeterlikleri. [Doctoral dissertation, Abant İzzet Baysal University]. Abant İzzet Baysal Üniversitesi Eğitim Bilimleri Enstitüsü, Bolu, Turkey.
- Yıldız, E. (2019). Okul yöneticilerinin dönüştürücü liderlik davranışlarının öğretmenlerin bireysel yenilikçilik algılarına etkisi. [Unpublished master's thesis]. Bolu Abant İzzet Baysal Üniversitesi, Bolu, Turkey.