Linking School Principals' Transformational Leadership Practices and Teachers' Innovative Work Behaviors in a Centralized Educational System

Merkezi Bir Eğitim Sisteminde Okul Müdürlerinin Dönüşümsel Liderlik Uygulamaları ile Öğretmenlerin Yenilikçi İş Davranışlarını İlişkilendirme

İsmail ÇİMEN[1] , **Cüneyt BELENKUYU**[2] , **Mehmet AKSU**[3]

Abstract: The primary objective of this research was to examine how transformational leadership practices employed by school principals in a centralized educational system influence teachers' innovative work behaviors. Our focus was on investigating the extent to which principals' leadership practices could predict and enhance teachers' innovative behaviors in Türkiye. Furthermore, we aimed to identify specific leadership practices that have a significant impact on promoting teachers' innovative behaviors. To achieve these goals, a correlational research design was adopted, and multiple regression analysis was conducted in prediction model. A total of 323 teachers participated in the study. Through our analysis, we discovered that certain transformational leadership practices exhibited by school principals had a noteworthy association with teachers' innovative work behavior. Specifically, inspiring a shared vision, challenging existing processes, and serving as role models were identified as crucial leadership behaviors in fostering innovation among teachers. On the other hand, while encouraging the heart and enabling others to act were found to be important, they were comparatively less influential in driving innovative behaviors among teachers. By considering the amount of variation explained in various regression models, we can confidently assert that principals possess the potential to significantly enhance teachers' innovative work behavior. These findings carry important implications for policy and practice in the realm of education, particularly within a centralized educational structure. It is essential to recognize and prioritize the cultivation of transformational leadership practices that promote innovation among teachers, as this can positively impact the overall effectiveness of the educational system.

Keywords: Transformational leadership; innovative work behavior; innovation; centralized educational system.

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Öz: Bu araştırmanın temel amacı, merkezi bir eğitim sisteminde okul müdürlerinin dönüşümcü liderlik davranışlarının öğretmenlerin yenilikçi iş davranışlarındaki rolünü açıklamaktır. Araştırmanın odak noktası, okul müdürlerinin liderlik uygulamalarının Türkiye'deki öğretmenlerin yenilikçi iş davranışlarını ne ölçüde yordayabileceğini ortaya koymaktır. Ayrıca, öğretmenlerin yenilikçi davranışlarını teşvik etmede önemli bir etkisi olabilecek dönüşümcü liderlik uygulamalarını belirlemek amaçlanmıştır. Bu amaçlara ulaşmak için ilişkisel bir araştırma deseni benimsenmiş ve tahmin modelinde çoklu regresyon analizi yapılmıştır. Araştırmanın çalışma grubunda toplam 323 öğretmen yer almıştır. Analizler sonucunda, okul müdürlerinin sergilediği belirli dönüşümcü liderlik uygulamalarının öğretmenlerin yenilikçi çalışma davranışlarıyla önemli bir ilişkisi olduğunu belirlenmiştir. Özellikle, ortak bir vizyon oluşturma, mevcut süreçlere meydan okuma ve rol model olma, öğretmenler arasında yenilikçilik konusunda önemli liderlik davranışları olarak belirlenmiştir. Öte yandan, kalbi cesaretlendirme ve diğerlerinin harekete geçmesini sağlama, önemli olmakla birlikte, öğretmenler arasında yenilikçi davranışları teşvik etmede nispeten daha az etkili bulunmuştur. Farklı regresyon modellerinde açıklanan varyans oranlarını dikkate alarak, okul müdürlerinin öğretmenlerin yenilikçi çalışma davranışlarını önemli ölçüde geliştirme potansiyeline sahip oldukları söylenebilir. Bu bulgular, özellikle merkezi bir eğitim yapısı içinde eğitim politikası ve uygulaması için önemli sonuçlar taşımaktadır. Öğretmenler arasında yeniliği teşvik eden dönüşümcü liderlik uygulamalarının tanınması, geliştirilmesi, ve önceliklendirilmesi eğitim sisteminin genel etkinliğine olumlu bir etki yapması açısından önemlidir.

Anahtar Kelimeler: Dönüşümcü liderlik, yenilikçi iş davranışı, yenilik, merkezi eğitim sistemi.

[1]* Başlıca Yazar (Corresponding author), Sorumlu Yazar: Dr. Öğr. Üye. İsmail Çimen, Bursa Uludağ Üniversitesi, Eğitim Bilimleri Bölümü, ismailcimen@uludag.edu.tr, ORCID: 0000-0001-9160-2856

[2] Arş. Gör. Dr. Cüneyt Belenkuyu, Süleyman Demirel Üniversitesi, Eğitim Bilimleri Bölümü, cuneytbelenkuyu@sdu.edu.tr, ORCID: 0000-0002-4861-5747

[3] Dr. Mehmet Aksu, Milli Eğitim Bakanlığı, maksu63@yahoo.com., ORCID: 0009-0005-9056-3492

1. INTRODUCTION

Possessing knowledge alone is no longer sufficient to achieve success in organizations. Instead, the ability to process knowledge in diverse ways has become increasingly critical. As a result, organizations that develop innovative capacity gain a competitive advantage in their related fields. Those that can apply knowledge in innovative ways tend to achieve more success in their respective domains. However, organizations cannot build innovative capacity independently. When we view organizations as social systems (Parsons, 2017), the primary factor determining their ability to adopt innovative practices is their human resources. In the context of educational organizations, human resources predominantly include teachers and principals, whose level of understanding and expertise in innovation is reflected in the fundamental processes of the school.

Thurlings et al. (2015) summarize why teachers' and principals' innovative capacity is critical for students and society, referring to three main reasons: (i) innovative behavior is vital for adapting to and accommodating the latest changes and demands of education and society; (ii) updating core technological aspects of teaching and learning requires innovative thinking from teachers and principals; (iii) schools serve as a model and guide for innovation in society to gain a competitive edge. These reasons highlight the significance of innovative behavior in educational organizations for students, schools, and society as a whole. Therefore, innovative behavior is considered a crucial component of teaching (Thurlings et al., 2015), and it is essential to understand how to develop it (Wu et al., 2022) to ensure that educational systems keep pace with current developments (Zainal & Matore, 2019).

Several studies across different fields have shown that leaders have a significant impact on the development of employees' innovative capacity (Afsar et al., 2014; Jung et al., 2003; Suhana et al., 2019; Yidong and Xinxin, 2013). Similarly, scholars in the field of educational sciences have explored the relationship between different leadership styles of principals and the innovative behavior of teachers (e.g., Gkorezis, 2016; Sagnak, 2012; Zainal and Matore, 2019; Zhu et al., 2019). However, research on the specific role of school leaders in promoting the capacity for innovation is limited and remains a critical area for investigation. Moreover, the main insights about how school leaders can evoke teachers' innovative capacity come from western countries whose educational system is mostly decantralized and provide school principals a considerable amount of autonomy while managing human resources. There is limited research on how school leadership can affect teachers' innovative capacities especially in the context of transformational leadership in centralized and hierarchical education systems like Türkiye. As indicated by OECD (2020) results, nearly % 73 of decisions about education are mainly taken by central government in the country. Moreover, principals have only a limited role in decision making, as their role remains just applying what is demanded by central structure.

The unique structure of educational organizations may hinder the emergence of innovative behaviors, particularly in schools that face centralized demands. In such settings, leaders are viewed as civil servants who function as line managers within a highly centralized national education system (Hallinger & Lee, 2014). Moreover, centralized education systems discourage principals from developing specific objectives for their schools by limiting their control over school operations (Gümüş et al., 2021). Therefore, the relationship between the transformation leadership and innovative work behaviours needs to be re-evaluated in the context of centralized systems.

1.1. Innovative Work Behavior

Innovation is defined as the act of modifying products or services and leveraging them in various ways to increase their value (Wu & Lin, 2018). It involves creating, inventing, and seizing opportunities that are vital for the survival, success, growth, and advancement of better civilizations (Zainal & Matore, 2019). Although some previous research has used innovation and creativity interchangeably, innovation comprises both generating and implementing ideas, while creativity is mainly associated with generating

novel ideas. Innovation involves creativity, as argued by Suhana et al. (2019), and therefore, innovative work behavior (IWB) requires both creativity and employees' ability to implement novel ideas in the context of innovation.

The meaning of IWB involves an employee's ability to find, apply, and support new concepts (Janssen, 2004; Scott & Bruce, 1994), which can be executed to advance individual and organizational performance (Baer, 2012; De Jong & Den Hartog, 2007). This intricate and multi-dimensional concept encompasses a wide variety of employee behaviors that contribute to the organization's ability to innovate (De Jong & Den Hartog, 2007; Devloo et al., 2015). Although most studies on IWB consider three dimensions, such as idea generation, promotion, and implementation (Janssen, 2000; Yang et al., 2016), the current study follows De Jong & Den Hartog (2010) in defining IWB as a four-dimensional structure that incorporates idea exploration as the first step towards innovation.

According to De Jong & Den Hartog (2010), the innovation process begins with exploring new ideas, involving seeking ways to improve existing products, services, or processes through fresh perspectives. Idea generation, the second step, involves producing valuable and innovative ideas by combining and restructuring existing concepts to address problems or enhance performance. This process is recognized as the hallmark of innovative behavior, distinct from other activities in an organization (Messmann et al., 2010) and serves as a trigger for progress. Once ideas are generated, the next step is idea promotion, encompassing seeking support, circulating, and building coalitions to implement new ideas. Finally, the generated and promoted ideas need to be implemented to become an innovation. The last step, idea implementation, involves result-oriented behaviors that require significant effort to test, modify, and put the new idea into practice (De Jong & Den Hartog, 2010).

In the context of educational organizations, innovation is accepted as a way of making positive changes and providing continuous development of schools (Chen, 2010; Rashid & Halim, 2014). It includes essential modifications and improvements for both classroom and school-level environments. Defining new goals, developing new methods and processes, working collaboratively between teaching staff, cooperating with other schools and different stakeholders in a novel and result-oriented way are all parts of innovation in educational organizations (Messmann et al., 2010). In terms of innovative work behaviors in schools, teachers may be labeled as the 'leading actors' of a novel scenario. Teachers' capability to learn and apply new pedagogical approaches, make functional instructional changes, and develop new teaching practices helps both students and schools solve challenging problems and improve organizational outputs (Messmann & Mulder, 2014; Wang et al., 2010).

When applying De Jong and Den Hartog's (2010) framework of Innovative Work Behaviors (IWB) to educational organizations, the idea exploration stage requires teaching staff to step outside their comfort zone and engage in critical thinking about school processes that need to be changed or improved to provide better learning opportunities for students. Careful observation and examination are crucial for teachers, as they may identify issues to explore new ideas by observing their teaching practices, students, parents, management, and other school-based processes. They can then search for new ways to enhance what is missing or inadequate in the observed areas. In the promotion stage, teachers can collaborate with other teachers, principals, parents, or other stakeholders to promote their ideas, leveraging the diverse school communities composed of individuals, groups, institutions, and businesses in the school's vicinity. In the idea implementation stage, teachers can leverage new technologies, methods, collaboration, and cooperation tactics developed in the previous stages to provide students with better learning opportunities.

1.2. Transformational Leadership

Research on transformational leadership provides evidence that this leadership style significantly influences the effectiveness of educational organizations (Tengi et al., 2017). Studies have shown that leaders who exhibit transformational leadership behaviors in their organizations have a positive impact on employee attitudes and behaviors, such as job satisfaction (Kouni et al., 2018), commitment (Batool, 2013; Kıyat & Geyik, 2019), job performance (Çalışkan, 2018; Jyoti & Bhau, 2015), innovation (Al-husseini et al., 2021; Mokhber et al., 2015), and organizational climate (Ayık & Diş, 2015).

As the first scholar to conceptualize transformational leadership, Burns (1978, p. 20) qualified transformational leadership as a style that "occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality." In this way, a change occurs in the commitment level with an increase in the capacity to mutually achieve a common purpose (Stewart, 2006). Since Burns, the literature on the constituents of transformational leadership has evolved with refinements in both the conceptualization and measurement of transformational leadership (Long et al., 2014).

Several notable models of transformational leadership have been proposed. Among them, the model of Bass (1985) has influenced leadership literature more than any of the others (Yukl & Gardner, 2019). The Bass transformational leadership theory is composed of four basic leadership components: idealized influence (the leader sets himself/herself as a role model with which the followers identify by having a clear vision and a sense of purpose), inspirational motivation (providing a vision which stimulates the energy to accomplish high standards of performance envisioned in a valued future by the leader), intellectual stimulation (stimulating the followers to foster their creativity and innovation by questioning assumptions and looking at old problems in new ways), and individual consideration (diagnosing the developmental needs of followers like a coach or mentor by treating each follower individually) (Bass & Riggio, 2006; Bass, 1999; Bass & Avolio, 1990; Bass, 1990). However, the five leadership practices framework, which is consistent with transformational leadership models (Posner, 2016) and is more comprehensively applied by practitioners in leadership development programs than empirical research (Bass & Riggio, 2006), has also been acknowledged by many researchers as a true exemplar of highly effective leadership practices (Taylor, 2002). In this study, we focused more on the collections of practices and behaviors of principals as leaders in educational organizations rather than the position itself. We based the operationalization of transformational leadership on the conceptualization of Kouzes and Posner's leadership practices model, which "suggests that leadership is not about personality, situation, or position, but a collection of behaviors and actions" (Konuk & Posner, 2021, p. 81). From Kouzes and Posner's (2012, pp. 16-24) perspective, five leadership practices are considered crucial in creating effective leadership behavior, as follows:

Model the way: Leaders clarify values by finding his/her voice and being clear about the guiding principles. Then, as a part of a team, leaders also affirm the group's shared values. However, since it does not make sense for these values to be just words, leaders set the example by aligning actions with shared values.

Inspire a shared vision: By imagining exciting and ennobling possibilities, leaders envision the future which fulfills the common good. To be able to enlist the followers in a mutual vision, leaders appeal to shared aspirations. If the leader shows his/her enthusiasm and excitement for the future, he/she can ignite the passion in followers.

Challenge the process: Leaders look for innovation as pioneers, eager to stride into the unknown. Because innovation and change require experimenting and taking risks, leaders proceed whatever it takes, achieve small wins and see mistakes as opportunities to learn from experience. Leaders also know that listening more than telling brings innovation.

Enable others to act: Leaders foster collaboration by building mutual trust and becoming actively involved with others. Leaders help others to realize their talent and strength and feel capable and powerful.

Followers who increase self-determination and develop competence give it their all and exceed their expectations.

Encourage the heart: Leaders recognize the contributions of people and appreciate their efforts. Leaders also create a cultural atmosphere that emphasizes celebrating the values and accomplishments by creating a community spirit.

1.3. Innovative Work Behavior and Transformational Leadership

Leadership is found to be a significant determiner for employees' capability to produce innovation in organizations (Amankwaa et al., 2021; Khan et al., 2020; Khaola & Coldwell, 2019; Wu & Lin, 2018; Zhong et al., 2022) and is one of the most studied subjects in IWB literature of different fields. Among the leadership styles, transformational leadership was studied in a considerable amount of research linking leadership and IWB. The reason may be that how followers perceive their leaders' transformational leadership ability and competence is closely related to their outcomes (Braun et al., 2013; Khan et al., 2020).

In line with other organizational behavior studies, there is extensive research on leadership with a particular focus on the IWB of teachers in education literature. For example, in their systematic review, both Zainal and Matore (2019) and Thurling et al. (2015) found that leadership was one of the most crucial focuses of IWB studies. In this sense, there are studies revealing the role of different types of leadership in the innovative work behavior of teachers, such as servant leadership (Jan et al., 2021), empowering leadership (Gkorezis, 2016; Sagnak, 2012; Zhu et al., 2019) or ethical leadership (Zahra et al., 2017), as well as transformational leadership (Abbas et al., 2012; Bednall et al., 2018; Rashid & Halim, 2014; Vermeulen et al., 2020; Zainal & Matore, 2021).

Transformational leadership is considered one of the main booster of teachers' innovative practices (Kılınç et al., 2022). According to Messman et al. (2010), innovative work behavior can be enhanced by supporting others in generating new ideas for their work. School principals are regarded as a supportive mechanism in the relationship between transformational leadership and teachers' IWB, as they guide teachers, establish new visions and goals, reframe and solve problems, suggest new solutions, and communicate expectations (Basadur, 2004; Rashid & Halim, 2014). Transformational leadership demands that principals idealize desired behavior by sharing a vision and motivating teachers to act, inspire and encourage them by setting an example, clarify the path to new practices, instill confidence in teachers, and empower them in the context of IWB (Abbas et al., 2012). Principals are expected to demonstrate a combination of these leadership practices to have a positive impact on teachers' IWB (Bednall et al., 2018).

1.4. Aim of the study

The objective of this study is to explore how school principals' leadership practices can predict teachers' innovative behaviors in Türkiye, with a focus on transformational leadership, and to identify effective leadership practices that can boost teachers' innovative behaviors. We sought answers to the following questions:

1- According to teachers' views, what is the level of teachers' innovative work behavior and principals' transformational leadership practices?
2- What is the level of relationship between teachers' innovative work behaviors and principals' transformational leadership practices?
3- How can principals' transformational leadership practices predict teachers' innovative work behaviours?

4- Which dimensions of principals' transformational leadership practices are most effective in predicting teachers' innovative work behaviors?

1.5. The importance of the study

The findings of the present study hold significance on multiple fronts. Firstly, our research endeavors to shed light on how school principals can foster innovative work behaviors within a centralized educational system, thereby providing fresh perspectives for scholarly discourse. It is important to acknowledge that in decentralized systems, school principals may have greater autonomy, potentially resulting in a stronger correlation between transformational leadership and innovative work behaviors. Nevertheless, our understanding of whether this relationship holds true in centralized systems remains limited. Thus, our findings will contribute to the ongoing discussions regarding the outcomes of transformational leadership and the factors that influence innovative work behaviors. Moreover, our study will unveil the specific leadership practices that hold promise in augmenting innovative work behaviors, thereby offering valuable insights for practical implementations. By identifying these practices, we aim to facilitate the development of strategies that effectively promote innovation among teachers. This will not only enhance the overall quality of education within centralized systems but also expand the repertoire of leadership approaches that can be adopted in diverse educational settings..

2. METHOD

2.1. Research design

To understand the role of transformational leadership behaviors of principals in teachers' innovative work behavior, we employed the prediction research method of correlational designs which aims to "provide a more accurate estimation of prediction" (McMillan & Schumacher, 2006, p.224).

2.2. Sampling Strategy

The study sample comprises 326 teachers working in Bilecik. According to the Bilecik Provincial Directorate of National Education, there are 2000 teachers working in schools in Bilecik. A minimum sample size of 322 teachers is considered sufficient for the population with a 95 percent confidence level and a 5 percent confidence interval (Cohen et al., 2018). We used a convenience sampling strategy to reach the minimum sample size because, as a non-probability sampling strategy, convenience sampling is less complicated to set up, less expensive, and adequate without a generalization effort (Cohen et al., 2018). Table 1 provides details of the participants' demographic characteristics.

Table 1.

Demographic Characteristics of the Participants

Variable	n	%
Gender		
Female	175	53.7
Male	151	46.3
Highest educational level		
Undergraduate degree	284	87.1
Graduate degree	42	12.9
School Type		
Preschool	6	1.8
Primary school	39	12.0
Secondary school	209	64.1
High school	72	22.1
Professional seniority		
1 year	14	4.3
2-5 years	63	19.3
6-10 years	77	23.6
10-20 years	129	39.6
20+ years	43	13.2

2.3. Data Collection Tools

To measure teachers' views on principals' transformational leadership behaviors and their innovative work behaviors in schools, we used Leadership Practices Inventory (LPI) and the Innovative Work Behavior Scale (IWB).

2.3.1. Leadership practices inventory (LPI)

Leadership practices inventory (LPI) was developed by Kouzes & Posner (2003) and adopted to Turkish by Yavuz (2010). The inventory, made up of 30 items in a 5-point Likert structure, consists of five sub-dimensions as "model the way", "inspiring a shared vision", "challenging the process", "encouraging the heart", and "enabling others to act". In addition to acceptable fit values presented in Table 2, the internal consistency coefficients of the factors were acceptable: 0,87 for model the way, 0,93 for inspiring a shared vision, 0.90 for challenging the process, 0,93 for encouraging the heart, and 0,93 for enabling others to act. The internal consistency coefficient of the whole inventory was 0,98. These coefficients are between the suggested range that is higher than 0,60 is quite reliable (Özdamar, 2004). In the literature, there is a trend towards using Bass's Multifactor Leadership Questionnaire for measuring transformational leadership. However, in this study, the Leadership Practices Inventory (LPI), another scale with established validity and reliability in the literature (Konuk & Posner, 2021; Fields & Herold, 1997; Posner, 2016), was employed to assess transformational leadership. This choice was made because the study focused on the direct leadership behaviors and actions, as well as the role of these leadership behaviors in fostering innovative work behaviors, rather than considering the positions of school administrators within the organization, their individual characteristics, or organizational circumstances in terms of transformational leadership.

2.3.2. *Innovative work behavior scale (IWB)*

Innovative work behavior scale (IWB) was developed by de Jong & den Hartog (2010) and adopted to Turkish culture by Çimen & Yücel (2017). The scale was developed in a 5-point Likert form. Factors of the scale involved three items for "idea generation", two items for "idea exploration", two items for "idea championing", and three items for "idea implementation". The factor structure of the scale was confirmed with confirmatory factor analysis summarized in Table 2. While the internal consistency coefficient of the whole inventory was 0.92, the internal consistency coefficients of the factors were 0.64 for idea exploration, 0.82 for idea generation, 0.79 for idea championing, and 0.84 for idea implementation. These coefficients are between the suggested range that is higher than 0.60 is quite reliable (Özdamar, 2004).

Table 2.

Evaluation of the Confirmatory Factor Analyses

Fit criteria	IWB	LPS	Cut point for acceptance	Reference
χ^2/d	2.83	2.53	<3	Bollen (1989)
RMSEA	0.075	0.069	≤ 0.08	Hooper, Coughlan and Mullen (2008)
SRMR	0.033	0.036	≤ 0.08	Hu and Bentler (1999)
NNFI	0.98	0.99	≥ 0.95	Hu and Bentler (1999)
CFI	0.99	0.99	≥ 0.95	Sümer (2000)
GFI	0.95	0.83	0 (no fit) to 1 (perfect fit)	Schumacker and Lomax (1996)
AGFI	0.91	0.80	0 (no fit) to 1 (perfect fit)	Schumacker and Lomax (1996)

2.4. Data Analysis Procedure

To examine the effect of principals' transformational leadership behaviors on teachers' innovative work behaviors in schools, we employed standard multiple regression analysis. We set up regression models, with each sub-dimension of the leadership practices scale serving as an independent variable and each sub-dimension of the IWB scale as a dependent variable. Before conducting multiple regression analysis, we performed a preliminary analysis of the raw data to ensure that our data met the assumptions of multiple regression analysis. Our sample size was adequate for testing multiple regression. We used univariate and multivariate outlier screening procedures to identify and handle outliers. For univariate outliers, we used z-scores, accepting cases with standardized scores greater than 3.29 as potential outliers (Tabacknick & Fidell, 2013). To detect multivariate outliers, we examined Mahalanobis distance values and accepted cases with values greater than 18.47 (Pearson & Hartley, 1966) as critical values for four independent variables as potential outliers. Three rows of data were excluded from the analysis following outlier screening procedures. We also checked the distribution of the data to ensure normality. The skewness and kurtosis values were within acceptable limits of +2 and -2 (George & Mallery, 2010). To evaluate the assumptions of normality, linearity, homoscedasticity, and independence of residuals, we respectively examined the Normal P-P Plot, the scatterplot, and the Durbin-Watson value. The Normal P-P Plot showed no major deviations from normality, with points lying on a straight diagonal line. The overall shape of the scatterplot was rectangular, indicating the linearity and homoscedasticity of residuals. The Durbin-Watson values in our study were within acceptable limits of 1-3 (Field, 2005). To assess multicollinearity and singularity, we used Tolerance and VIF values and Condition Indexes. Collinearity diagnostics of the study indicate no tolerance value less than 0.10 and VIF value more than 10 (Pallant, 2020), indicating no multicollinearity.

2.5. Ethics approval

In this study, all the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Guidelines" were strictly followed. None of the actions specified under the section titled "Actions Contrary to Scientific Research and Publication Ethics" in the guidelines were carried out.

Ethics Committee Approval Information:

Ethical committee: Bursa Uludağ University, Social and Human Sciences Research and Publication Ethics Committee

Data of ethical approval: February 25, 2022

The number of ethical approval: 62

3. FINDINGS

In this section, the descriptive findings, correlations of the variables and regression models were presented respectively. Table 3 presents minimum and maximum values, means, standard deviations among the variables.

Table 3.

Descriptive Findings for the Scales

	Min.	Max.	Mean		Std. Deviation
			Statistic	Std. Error	Statistic
Innovative Work Behavior	10.00	50.00	3.60	0.037	0.667
Idea Exploration	2.00	10.00	3.57	0.044	0.775
Idea Generation	3.00	15.00	3.60	0.041	0.733
Idea Championing	2.00	10.00	3.54	0.046	0.825
Idea Implementation	3.00	15.00	3.64	0.042	0.763
Transformational Leadership	32.00	148.00	3.61	0.045	0.811
Model The Way	3.00	15.00	3.64	0.048	0.857
Inspiring A Shared Vision	10.00	45.00	3.60	0.045	0.801
Challenging The Process	5.00	25.00	3.52	0.049	0.874
Encouraging The Heart	7.00	35.00	3.69	0.049	0.880
Enabling Others to Act	6.00	30.00	3.64	0.052	0.940

Descriptive findings show that the mean of teachers' innovative work behavior was 3.60, and principals' transformational behavior was 3.61, both of which can be labelled as moderate. The highest value for the IWB was idea implementation, and the least value was idea championing. Encouraging the heart was highest for transformational leadership, while challenging the process is the least.

Table 4.
Correlation Matrix of Variables

	A	A1	A2	A3	A4	B	B1	B2	B3	B4	B5
A-IWB	1										
A1-Idea Exploration	.76 5**	1									
A2-Idea Generation	.89 4**	.59 1**	1								
A3-Idea Championing	.86 3**	.54 4**	.69 4**	1							
A4- Idea Implementation	.91 4**	.59 3**	.74 5**	.76 0**	1						
B-TL	.55 1**	.46 2**	.46 1**	.51 0**	.48 3**	1					
B1-Model the Way	.51 2**	.43 7**	.44 9**	.42 4**	.45 9**	.87 7**	1				
B2-Inspiring A Shared Vision	.55 6**	.45 0**	.48 1**	.51 3**	.48 2**	.96 0**	.84 8**	1			
B3-Challenging the Process	.52 8**	.45 0**	.41 6**	.50 5**	.47 2**	.92 1**	.75 5**	.85 2**	1		
B4-Encouraging the Heart	.49 8**	.44 1**	.39 9**	.47 0**	.43 0**	.95 3**	.79 2**	.88 1**	.86 9**	1	
B5-Enabling Others to Act	.48 2**	.38 9**	.41 3**	.44 9**	.42 2**	.93 3**	.79 6**	.85 4**	.81 6**	.86 1**	1

**Correlations are significant at 0.01 level

Table 4 presents the correlations among the variables and their sub-dimensions. As expected, transformational leadership is significantly correlated with innovative work behavior of teachers (r=.551, p<0.01) and its subdimensions – idea exploration (r=.462, p<0.01), idea generation (r=.461, p<0.01), idea championing (r=.510, p<0.01) and idea implementation (r=.483, p<0.01). Transformational leadership's subdimensions also significantly correlated with innovative work behavior – model the way (r=.512, p<0.01), inspiring a shared vision (r=.556, p<0.01), challenging the process (r=.528, p<0.01), encouraging the heart (r=.498, p<0.01) and enabling others to act (r=.482, p<0.01).

Table 5.

Multiple Regression Matrix

	Variable	B	S.E.	β	t	P	Tol.	VIF
Model A	**Intercept**	18.714	1.447		12.929	.000		
	Model the way	.384	.234	.148	1.636	.103	.260	3.841
	Inspiring a shared vision	.326	.113	.352	2.874	.004	.141	7.068
	Challenging the process	.368	.155	.241	2.377	.018	.207	4.835
	Encouraging the heart	-.102	.128	-.094	-.797	.426	.152	6.591
	Enabling others to act	-.061	.121	-.052	-.506	.613	.204	4.899
	R= 0.572	F=30.777				Durbin-Watson		
	R²=0.327	P=0.00				1.843		
Model B	**Intercept**	3.766	.359		10.482	.000		
	Model the way	.117	.058	.193	2.003	.046	.260	3.841
	Inspiring a shared vision	.027	.028	.127	.971	.332	.141	7.068
	Challenging the process	.078	.038	.220	2.037	.042	.207	4.835
	Encouraging the heart	.030	.032	.118	.933	.352	.152	6.591
	Enabling others to act	-.043	.030	-.155	-1.422	.156	.204	4.899
	R= 0.482	F=19.219				Durbin-Watson		
	R²=0.233	P=0.00				1.924		
Model C	**Intercept**	5.956	.506		11.764	.000		
	Model the way	.142	.082	.166	1.737	.083	.260	3.841
	Inspiring a shared vision	.131	.040	.429	3.306	.001	.141	7.068
	Challenging the process	.041	.054	.082	.763	.446	.207	4.835
	Encouraging the heart	-.069	.045	-.193	-1.540	.124	.152	6.591
	Enabling others to act	.005	.042	.013	.119	.905	.204	4.899
	R= 0.494	F=20.425				Durbin-Watson		
	R²=0.244	P=0.00				1.935		
Model D	**Intercept**	3.253	.369		8.815	.000		
	Model the way	-.038	.060	-.060	-.641	.522	.260	3.841
	Inspiring a shared vision	.087	.029	.381	3.014	.003	.141	7.068
	Challenging the process	.105	.039	.277	2.651	.008	.207	4.835
	Encouraging the heart	-.013	.033	-.047	-.386	.700	.152	6.591
	Enabling others to act	-.004	.031	-.015	-.139	.889	.204	4.899
	R= 0.531	F= 24.857				Durbin-Watson		
	R²=0.282	P=0.00				1.943		
Model E	**Intercept**	5.738	.522		10.995	.000		
	Model the way	.163	.085	.183	1.925	.055	.260	3.841
	Inspiring a shared vision	.080	.041	.253	1.963	.050	.141	7.068
	Challenging the process	.144	.056	.274	2.575	.010	.207	4.835
	Encouraging the heart	-.050	.046	-.135	-1.084	.279	.152	6.591
	Enabling others to act	-.019	.044	-.047	-.441	.660	.204	4.899
	R= 0.507	F= 21.948				Durbin-Watson		
	R²=0.257	P=0.00				1.909		

Table 5 displays the regression models for all of the five transformational leadership factors as independent variables (IVs) and each factors of IWB as dependent variables (DVs). We employed standard multiple regression approach for each model. The unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (β), R and R2 were presented.

The results of standard multiple regression analysis in Model A indicated the linear combination of the dimensions of TL predicted IWB total [F(5,317)=30.777, p<.001]. The multiple correlation coefficient of 0.572 explained that approximately 33 percent of the variance in IWB can be accounted for by the linear combination of the five factors of TL. The results of Model A also indicates that the dimensions of inspiring a shared vision and challenging the process most significantly contributed to the prediction of the criterion variable while the other three dimensions were not significant in predicting IWB.

The results of standard multiple regression analysis in Model B indicated the linear combination of the dimensions of TL predicted idea exploration dimension of IWB [F(5,317)= 19.219, p<.001]. The multiple correlation coefficient of 0.482 explained that approximately 24 percent of the variance in idea exploration dimension of IWB can be accounted for by the linear combination of the five factors of TL. The results of Model B also indicates that the dimensions of model the way and challenging the process most significantly contributed to the prediction of the criterion variable while the other three dimensions were not significant in predicting IWB's idea exploration dimension.

The results of standard multiple regression analysis in Model C indicated the linear combination of the dimensions of TL predicted idea generation dimension of IWB [F(5,317)= 20.425, p<.001]. The multiple correlation coefficient of 0.494 explained that approximately 25 percent of the variance in idea generation dimension of IWB can be accounted for by the linear combination of the five factors of TL. The results of Model C also indicates that the dimension of inspiring a shared vision most significantly contributed to the prediction of the criterion variable while the other four dimensions were not significant in predicting IWB's idea generation dimension.

The results of standard multiple regression analysis in Model D indicated the linear combination of the dimensions of TL predicted idea championing dimension of IWB [F(5,317)= 24.857, p<.001]. The multiple correlation coefficient of 0.531 explained that approximately 29 percent of the variance in idea championing dimension of IWB can be accounted for by the linear combination of the five factors of TL. The results of Model D also indicates that the dimensions of inspiring a shared vision and challenging the process most significantly contributed to the prediction of the criterion variable while the other three dimensions were not significant in predicting IWB's championing dimension.

The results of standard multiple regression analysis in Model E indicated the linear combination of the dimensions of TL predicted idea implementation dimension of IWB [F(5,317)= 21.948, p<.001]. The multiple correlation coefficient of 0.507 explained that approximately 26 percent of the variance in idea implementation dimension of IWB can be accounted for by the linear combination of the five factors of TL. The results of Model D also indicates that the dimensions of inspiring a shared vision and challenging the process most significantly contributed to the prediction of the criterion variable while the other three dimensions were not significant in predicting IWB's idea implementation dimension.

4. DISCUSSION AND CONCLUSION

The present research aims to contribute to the growing international literature on the influence of leadership practices on teachers' work behavior (Hidayat & Patras, 2022; Khaola & Oni, 2020; Sudibjo & Prameswari, 2021; Zhang et al., 2021). It provides evidence from a study conducted with 326 teachers in Turkey, where school principals function as civil servants and operate as line managers under the pressure of centralized demands. Specifically, this study seeks to build an understanding of how transformational leadership practices predict teachers' innovative work behaviors in a centralized educational system using multiple regression analysis. According to the results, the practices of leaders' transformational leadership

associated with innovative work behaviour were inspiring a shared vision, challenging process, and modelling the way, while encouraging the heart and enabling the others to act were found to be less essential. The findings suggest that principals can play an important role in enhancing teachers' innovative work behavior, as previously discussed in studies by different scholars such as Khaola & Oni (2020), Thurlings et al. (2015), and Zainal & Matore (2019).

We initially investigated the association between principals' transformational leadership practices and teachers' innovative work behavior. The findings provide compelling evidence of a significant relationship between these two constructs. This suggests that teachers are more inclined to display innovative work behaviors when their school principals actively practice transformational leadership behaviors in their managerial roles. Similar findings have been reported in studies conducted in both decentralized and centralized education systems (Abbas et al., 2012; Kılınç et al., 2022; Zainal & Matore, 2021). Consequently, it is reasonable to assert that transformational leadership is an essential attribute that contributes to a school's innovation culture, even in a centralized education system.

We also proposed that the dimensions of transformational leadership behaviors of principals have predicted the dimensions of innovative work behaviors of teachers differently. The results revealed that inspiring a shared vision and challenging the process are two dimensions of principals' transformational leadership behaviors that predict teachers' general innovative work behaviors with a variance rate of 33%, a value that is adequate to assign considerable attention in social sciences (Delen, 2014). This result points to the salience of a principal who can ignite passion in followers by envisioning a future based on shared aspirations. This finding also reveals that in educational institutions where uncertainties are frequently encountered, the probability of the emergence of innovative behaviors increases when the employees' expectations about the future are cleared from uncertainty with the vision-determining behaviors of the leader. This finding aligns with a study by Wu and Lin (2018), which demonstrated that a leader who clarifies values, guides subordinates, and sets an example through their actions can create conditions that facilitate others' innovative behaviors.

By examining various aspects of innovative work behavior independently, this study has identified significant evidence supporting the role of different dimensions of principals' transformational leadership behaviors in influencing teachers' innovative work behaviors. Specifically, principals' ability to challenge the process is crucial for fostering idea exploration, championing, and implementation. On the other hand, inspiring a shared vision becomes essential for idea generation, championing, and implementation. Meanwhile, modeling the way is found to contribute primarily to idea exploration, while encouraging the heart and enabling others to act do not predict any aspects of teachers' innovative work behavior. Based on these findings, it would be reasonable to assert that challenging the process and inspiring a shared vision are two relatively significant leadership behaviors that enhance teachers' innovative work behavior.

Challenging the process" emerged as the most influential variable in three out of five models, based on weighted Beta values, following Pallant's (2016) suggestion. This dimension requires leaders to embrace the uncharted and be risk-oriented (Kouzes & Posner, 2012), which has been linked to the innovative capacity of organizations in other studies (Brown & Osborne, 2016; Richard et al., 2017). Cotton (2003) notes that principals need to strategically embrace calculated risks for their schools, fostering an environment that empowers educators to adopt innovation and experimentation within their classrooms. Considering the context of a centralized education system, principals may face numerous challenges while attempting to establish an innovative work culture. Such systems demand control over various aspects of schools, including curriculum, teaching methods, technology, staff selection, and finance (Oplatka, 2004). Therefore,

"challenging the process" becomes even more vital in enhancing teachers' innovative work behavior within centralized systems.

"Inspiring a shared vision" encompasses behaviors such as imagining exciting and ennobling possibilities, envisioning the future, enlisting followers in a mutual vision, and appealing to shared aspirations (Kouzes & Posner, 2012). It emerged as another important variable for teachers' innovative work behavior in our study, particularly playing a significant role in idea generation. De Jong and Den Hartog (2007) propose two reasons why inspiring a shared vision is crucial for idea generation, which involves teachers' ability to produce novel and valuable ideas. Firstly, the vision serves as a framework that guides which ideas would be appreciated and valued within the organization. Secondly, if a generated idea aligns with the shared vision, championing that idea becomes easier as other members are more likely to accept it. Similarly, Melnyk and Davidson (2009) emphasize the vital role of inspiring a shared vision in fostering innovative cultures among employers. Doing so provides an opportunity to adopt quantifiable objectives and measurable outcomes for innovation.

Enable others to act and encourage the heart were two non-predictive variables in the present study. Therefore, we can conclude that these leadership behaviours have limited role in enhancing teachers' innovative work behaviour. However, there is evidence to assert that leaders' way of supporting and appreciating followers contribute to innovative work behaviours (De Jong & Den Hartog, 2007). Leader-oriented behaviours to build trust and strengthen the community appeared to be positively related to innovation culture of an organization (Denti & Hemlin, 2012). Dissociation of our findings may be referred to structural differences of centralised systems in which principals have limited ability to encourage the heart as they may have no tangible tools to appreciate efforts. Indeed, their inundation with bureaucratic tasks may hinder principals' ability to mobilize and motivate others effectively. Most school principals in a centralised system are so engrossed in bureaucratic affairs that they can't even find time to actively involved with others. This fact can actually explain the difference in the amount of the relationship between innovation and leadership in centralized and decentralized systems, as shown by the work of Denti and Hemlin (2012) that the relationship between leadership and innovation is strongest in decentralized systems. The dissociation of our findings could be attributed to the structural differences in centralized systems, where principals may have limited ability to "encourage the heart" as they lack tangible tools to appreciate efforts. Additionally, their inundation with bureaucratic tasks may hinder their capacity to effectively mobilize and motivate others. In many centralized systems, school principals become so engrossed in bureaucratic affairs that they struggle to find time to actively engage with others. This circumstance might explain the differences in the relationship between innovation and leadership in centralized and decentralized systems, as demonstrated by the work of Denti and Hemlin (2012), where the relationship between leadership and innovation was found to be strongest in decentralized systems.

The results of this study show that the discourses of school leaders which are not just words but turn into behaviors, and therefore into tangible actions consistent with shared values, and also leader behaviors such as taking risks, learning from their mistakes, and showing interest in the unknown are the leader attributions that will improve change and innovation in the school, and play a decisive role in teachers' finding alternative ways to improve existing processes and implementing emerging ideas with a result-oriented approach even in centralised school systems. Our results also add evidence to the literature by suggesting that transformational school leaders who envision the possibilities by showing their excitement for the future and fulfilling the common good are more likely to enable teachers to show idea generation and idea championing behaviors, which means generating new ideas and supporting them to succeed by removing the obstacles in front of these ideas. However, for teachers to adopt these informal roles and receive support for the success of innovative steps, it is expected that school principals should also take risks personally and be enthusiastic and a pioneer in stepping into innovation and the unknown by proceeding at any cost.

The results of the study also have some important practical implications. The literature shows school principals' leadership capabilities in transformation of educational settings are critical to achieve reformist positive change for policymakers (Eyal & Kark, 2004; Yang, 2014). Thus, school principals as educational leaders should pay attention to transformational leadership practices since they have great potential to positively impact innovative work behavior of teachers through different mechanisms. Furthermore, considering that school principalship is not considered as a separate profession from teaching in Türkiye, and therefore professional standards and codes are not formed as a profession, legal regulations and scientific training programs should be designed and implemented to train school administrators and to make principals execute sufficient transformational leadership practices that will ensure the transformation of the school. In the hierarchical and centralized structure of the Turkish education system, providing autonomy in decision-making and implementation can be presented as a policy proposal in the context of the study, for school administrators to demonstrate transformational leadership practices and therefore to prepare environments where teachers can display innovative work behaviors. A principal in centralised education system can contribute to schools' innovative culture by intentionally showing leadership behaviours such as clarifying values, guiding and setting example, taking risks, seeking ways to reach important achievements, learning from mistakes, and envisioning the future.

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GENİŞLETİLMİŞ ÖZET

1. GİRİŞ

Farklı alanlarda yapılan birçok çalışma, astların yenilikçi kapasitelerinin gelişiminde liderlerin önemli bir etkiye sahip olduğunu göstermiştir (Afsar vd., 2014; Jung vd., 2003; Suhana vd., 2019; Yidong ve Xinxin, 2013). Eğitim örgütlerinde yapılan çalışmalarda da okul müdürlerinin farklı liderlik tarzları ile öğretmenlerin yenilikçi davranışları arasındaki ilişki ortaya koyulmuştur (örneğin, Gkorezis, 2016; Sagnak, 2012; Zainal ve Matore, 2019; Zhu vd., 2019). Fakat okul yöneticilerinin yenilikçi davranış kapasitesini geliştirmedeki özel rolüne ilişkin araştırmalar hala sınırlıdır. Bununla birlikte, okul yöneticilerinin öğretmenlerin yenilikçi davranışlarını nasıl harekete geçirebileceğine dair temel kavrayışlar, eğitim sistemi çoğunlukla merkeziyetçilikten arındırılmış olan ve okul müdürlerine insan kaynaklarını yönetirken önemli ölçüde özerklik sağlayan Batı ülkelerinden gelmektedir. Okul yöneticilerinin, özellikle Türkiye gibi merkezi ve hiyerarşik eğitim sistemlerinde öğretmenlerin yenilikçi kapasitelerini nasıl etkileyebileceğine dair sınırlı sayıda araştırma bulunmaktadır. Buradan yola çıkarak bu çalışmada Türkiye'de okul müdürlerinin dönüşümcü liderlik uygulamalarının öğretmenlerin yenilikçi davranışlarını nasıl yordayabileceğini araştırmak ve öğretmenlerin yenilikçi davranışlarını artırabilecek etkili liderlik uygulamalarını belirlemek amaçlanmıştır. Araştırmada aşağıdaki sorulara yanıt aranmıştır:

1- Öğretmen görüşlerine göre, öğretmenlerin yenilikçi iş davranışları ve okul yöneticilerinin dönüşümcü liderlik uygulamaları ne düzeydedir?

2- Öğretmenlerin yenilikçi iş davranışları ile okul yöneticilerinin dönüşümcü liderlik uygulamaları arasında bir ilişki var mıdır?

3- Okul yöneticilerinin dönüşümcü liderlik uygulamaları öğretmenlerin yenilikçi iş davranışlarını nasıl yordayabilir?

4- Okul yöneticilerinin dönüşümcü liderlik uygulamalarının hangi boyutları öğretmenlerin yenilikçi iş davranışlarını yordamada en etkilidir?

Yenilikçi davranış, bir çalışanın yeni kavramları bulma, uygulama ve destekleme becerisini içerir (Janssen, 2004; Scott ve Bruce, 1994). Bu karmaşık ve çok boyutlu kavram, kurumun yenilik yapma kabiliyetine katkıda bulunan çok çeşitli çalışan davranışlarını kapsamaktadır (De Jong ve Den Hartog, 2007; Devloo vd., 2015). De Jong & Den Hartog'a (2010) göre yenilik süreci, yeni bakış açılarıyla mevcut ürünleri, hizmetleri veya süreçleri iyileştirmenin yollarını aramayı içeren yeni fikirleri keşfetmekle başlar. İkinci adım olan fikir üretimi, sorunları ele almak veya performansı artırmak için mevcut kavramları birleştirerek ve yeniden yapılandırarak değerli ve yenilikçi fikirler üretmeyi içerir. Bu süreç, bir kuruluştaki diğer faaliyetlerden farklı olarak yenilikçi davranışın ayırt edici özelliği olarak kabul edilir (Messmann vd., 2010) ve ilerleme için tetikleyici görevi görür. Sonraki adım yeni fikirleri uygulamak için destek aramayı, yaymayı ve koalisyonlar kurmayı kapsayan fikir teşvikidir. Son olarak, üretilen ve tanıtılan fikirlerin bir yeniliğe dönüşmesi için uygulanması gerekir. Son adım olan uygulama, yeni fikri test etmek, değiştirmek ve uygulamaya koymak için önemli çaba gerektiren sonuç odaklı davranışları içerir (De Jong & Den Hartog, 2010).

Dönüşümcü liderlik üzerine yapılan araştırmalar, bu liderlik tarzının eğitim örgütlerinin etkililiğini önemli ölçüde etkilediğine dair kanıtlar sunmaktadır (Tengi vd., 201). Bu çalışmada, eğitim örgütlerinde lider olarak yöneticilerin pozisyonlarından ziyade uygulama ve davranışlarına odaklanılmıştır. Dönüşümsel liderliğin kavramsallaştırılmasında ise Kouzes ve Posner'ın "liderliğin kişilik, durum ya da pozisyonla ilgili olmadığını, bir davranışlar ve eylemler bütünü olduğunu öne süren" liderlik uygulamaları modeli temel

alınmıştır (Konuk ve Posner, 2021, s. 81). Kouzes ve Posner'ın (2012, s. 16-24) bakış açısına göre, etkili liderlik davranışının yaratılmasında beş liderlik uygulamasının önemli olduğu düşünülmektedir: yolu modellemek, ortak bir vizyon oluşturmak, meydan okumak, başkalarını harekete geçirmek, cesaretlendirmek.

2. YÖNTEM

Bu araştırma, tahmine dayalı ilişkisel desende tasarlanmıştır. Araştırmanın örneklemini Bilecik ilinde görev yapan ve kolay örnekleme ile seçilen 326 öğretmen oluşturmaktadır. Öğretmenlerin okul müdürlerinin dönüşümcü liderlik davranışları ve okuldaki yenilikçi iş davranışları hakkındaki görüşlerini ölçmek için Kouzes & Posner (2003) tarafından geliştirilen ve Yavuz (2010) tarafından uyarlanan Liderlik Uygulamaları Envanteri ve de Jong & den Hartog (2010) tarafından geliştirilen ve Çimen & Yücel (2017) tarafından uyarlaması yapılan Yenilikçi İş Davranışları Ölçeği kullanılmıştır. Ölçme araçlarının mevcut araştırma için uygunluğunu belirlemek amacıyla doğrulayıcı faktör analizinden yararlanılmıştır.

Toplanan veriler analiz edilirken çoklu regresyon analizi kullanılmıştır. Liderlik uygulamaları ölçeğinin her bir alt boyutunun bağımsız değişken ve yenilikçi davranış ölçeğinin her bir alt boyutunun bağımlı değişken olduğu regresyon modelleri kurulmuştur. Analizler yapılmadan önce verilerin çoklu regresyon analizinin varsayımlarını karşılayıp karşılamadığı incelenmiştir.

3. BULGULAR

Betimsel bulgular incelendiğinde öğretmenlerin yenilikçi çalışma davranışı ortalamasının 3,60 ve müdürlerin dönüşümcü davranış ortalamasının 3,61 olduğu ve her ikisinin de orta düzeyde olarak nitelendirilebileceği görülmektedir. Yenilikçi davranış için en yüksek değer fikir uygulama, en düşük değer ise fikir teşviki olmuştur. Dönüşümcü liderlik için cesaretlendirme en yüksek değer alırken, sürece meydan okuma en düşük değerdedir.

Araştırma, dönüşümcü liderliğin öğretmenlerin yenilikçi iş davranışları ile orta düzeyde anlamlı bir ilişkiye sahip olduğunu göstermektedir. Aynı şekilde, dönüşümcü liderliğin alt boyutları da yenilikçi iş davranışı ile anlamlı şekilde ilişkilendirilmiştir. Çoklu regresyon analizi sonuçları, dönüşümcü liderliğin öğretmenlerin yenilikçi iş davranışlarını yordadığını ve beş boyutunun toplam varyansın yaklaşık yüzde 33'ünü açıkladığını göstermektedir. Ayrıca ortak bir vizyona ilham verme ve sürece meydan okuma boyutlarının yenilikçi davranışının tahminine en büyük katkıyı sağladığı görülmektedir. Diğer üç boyutun ise yenilikçi davranışı tahmin etmede anlamlı olmadığı görülmüştür. Benzer şekilde, dönüşümcü liderliğin fikir keşfi, fikir üretimi, fikir teşviki ve fikir uygulaması boyutlarını da tahmin etmekte etkili olduğu ortaya çıkmıştır. Ortak bir vizyona ilham vermenin ve sürece meydan okumanın yenilikçi davranışla ilgili sözü edilen boyutları tahmin etmede en büyük katkıyı sağladığını göstermektedir.

4. TARTIŞMA VE SONUÇ

Bu araştırma, liderlik uygulamalarının öğretmenlerin iş davranışları üzerindeki etkisine ilişkin giderek büyüyen uluslararası literatüre katkıda bulunmayı amaçlamaktadır (Hidayat ve Patras, 2022; Khaola ve Oni, 2020; Sudibjo ve Prameswari, 2021; Zhang vd., 2021). Araştırmada kararların merkezden alındığı bir eğitim sistemine sahip olan Türkiye'de okul müdürlerinin dönüşümcü liderlik uygulamalarının öğretmenlerin yenilikçi çalışma davranışlarını nasıl yordadığı ortaya koyulmuştur. Sonuçlara göre, okul yöneticilerinin yenilikçi çalışma davranışıyla ilişkili dönüşümcü liderlik uygulamaları ortak bir vizyona ilham verme, sürece meydan okuma ve yolu modelleme iken, cesaretlendirme ve diğerlerinin harekete geçmesini sağlamanın daha az önemli olduğu görülmüştür. Bulgular, daha önce Khaola & Oni (2020), Thurlings ve diğerleri (2015) ve Zainal & Matore (2019) gibi farklı araştırmacılar tarafından yapılan çalışmalarda tartışıldığı gibi, okul müdürlerinin öğretmenlerin yenilikçi çalışma davranışlarını geliştirmede önemli bir rol oynayabileceğini göstermektedir.

Bu çalışmanın sonuçları, okul liderlerinin paylaşılan değerlere ve tutarlı somut eylemlere dönüşen söylemlerinin ve risk alma, hatalarından ders çıkarma, bilinmeyene ilgi gösterme gibi davranışlarının okulda değişim ve yeniliği geliştirebileceğini göstermiştir. Bu sonuçlardan yola çıkarak, okul yöneticilerinin kısıtlı hareket alanı olsa da merkezi okul sistemlerinde bile öğretmenlerin mevcut süreçleri iyileştirmek için alternatif yollar bulmalarında ve ortaya çıkan fikirleri sonuç odaklı bir yaklaşımla hayata geçirmelerinde belirleyici rol oynadığı ifade edilebilir. Geleceğe yönelik tutkularını canlı tutan ve fırsatları öngören dönüşümcü okul liderleri, öğretmenlerin eğitimle ilgili yeni fikirleri üretme ve uygulama sürecine katkı sağlamaktadır.

ETHICAL APPROVAL

In this study, all the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Guidelines" were strictly followed. None of the actions specified under the section titled "Actions Contrary to Scientific Research and Publication Ethics" in the guidelines were carried out..

Ethics Committee Approval Information:

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CONTRIBUTION OF RESEARCHERS

The contribution percentages of the first and second authors to the research are 40%, while the third author's contribution is 20%.

Areas of contribution by the researchers:

Author 1: Design of the research, conceptual framework, methodology, validity and reliability, data analysis, and reporting.

Author 2: Conceptual framework, methodology, validity and reliability, data analysis, and reporting.

Author 3: Data collection, validity, and reliability.

CONFLICT OF INTEREST

There are no conflicts of interest.