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The Effect of Innovative Schools and Schools' Openness to Change on Teachers' Adaptive Performance*

Yenilikçi Okul ve Okulların Değişime Açıklığının Öğretmenlerin Uyumsal Performansına Etkisi

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ABSTRACT: In this study, it was aimed to examine the effect of teachers' perceptions of innovative schools and schools' openness to change on their perceptions of adaptive performance. Predictive correlational design was used in the study. Simple random sampling method was utilized to determine the sample. The sample consisted of 258 teachers. Personal Information Form, Innovative School Scale, Schools' Openness to Change Scale and Teachers' Perceived Adaptive Performance Scale were applied to collect the data. In data analysis, descriptive statistics, Pearson correlation and hierarchical regression analysis were used. In the study, teachers' perceptions of innovative schools and adaptive performance were found to be high, and their perceptions of schools' openness to change were found to be moderate. It was determined that innovative school and schools' openness to change together significantly predicted adaptive performance. It was determined that the dimensions of organizational impediments, teachers' openness to change and school environment's press for change were significant predictors of adaptive performance while innovative schools and schools' openness to change were together. It was concluded that in order to increase the adaptive performance of teachers, it is necessary to realize innovative practices in schools and to increase the openness of schools to change. Suggestions were made to prevent the factors that hinder innovations in schools and to increase the openness to change of teachers and the school environment.

Keywords: Adaptive performance, innovative school, openness to change, teacher.

ÖZ: Bu araştırmada, öğretmenlerin yenilikçi okul ve okulların değişime açıklık algılarının uyumsal performans algılarına etkisini incelemek amaçlanmıştır. Araştırmada yordayıcı korelasyonel desen kullanılmıştır. Örneklemin belirlenmesinde basit tesadüfi örnekleme yöntemi kullanılmıştır. Örneklemi 258 öğretmen oluşturmuştur. Verilerinin toplanmasında Kişisel Bilgi Formu, Yenilikçi Okul Ölçeği, Okulların Değişime Açıklık Ölçeği ve Öğretmenlerin Algıladıkları Uyumsal Performans Ölçeği kullanılmıştır. Verilerin analizinde betimsel istatistik, Pearson korelasyon ve hiyerarşik regresyon analizi kullanılmıştır. Araştırmada, öğretmenlerin yenilikçi okul ve uyumsal performans algıları yüksek, okulların değişime açıklık algıları orta düzeyde bulunmuştur. Yenilikçi okul ile okulların değişime açıklığının birlikte uyumsal performansı anlamlı bir şekilde yordadığı belirlenmiştir. Yenilikçi okul ile okulların değişime açıklığının birlikte iken Örgütsel engeller, Öğretmenlerin değişime açıklığı ve Okul çevresinin değişim başkısı boyutlarının uyumsal performansın anlamlı yordayıcıları olduğu belirlenmiştir. Öğretmenlerin uyumsal performanslarının daha fazla artması için hem okullarda yenilikçi uygulamaların gerçekleştirilmesinin hem de okulların değişime açıklığının arttırılmasının gerekli olduğu sonucuna ulaşılmıştır. Okullarda yeniliklerin engellenmesine neden olan faktörlerin önlenmesine, öğretmenlerin ve okul çevresinin değişime açıklığının arttırılmasına yönelik öneriler sunulmuştur.

Anahtar kelimeler: Değişime açıklık, öğretmen, uyumsal performans, yenilikçi okul.

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In order for organizations to survive, it is imperative that they adapt to the changes occurring in their environment. Due to this necessity, organizations make many changes in their structures, processes and methods. However, for the effectiveness of these changes, attention should be paid to equipping employees with the knowledge and skills that will require them to adapt to changes (Tunçer, 2012). This is because the inability of employees to adapt to their work environment can negatively affect their work performance and jeopardize the success and continuity of the organization (Tümkaya & Hürriyetoğlu, 2021). Therefore, adaptable employees are an organizational need in organizations with changing and dynamic environments. This need has increased the interest in understanding and increasing the adaptability of employees in the work environment with the increasing pace and types of change (Pulakos et al., 2000). As a result of this interest, employees' ability to cope with changes in the work environment has been emphasized (Wanberg & Banas, 2000) and it has been realized that traditional performance models are inadequate. Thus, adaptive performance, which refers to responding to changing job requirements, has been emphasized to determine the performance of employees under variable and uncertain conditions (Jundt et al., 2015). In this respect, adaptive performance was introduced as a dimension of job performance in line with the need to encourage new behaviors to achieve the goals of organizations as a result of changes in the work context (Charbonnier-Voirin & Roussel, 2012).

Adaptive performance is important for educational organizations where change and transformation are continuous. In particular, teachers' adaptive performance is emphasized in order to adapt to changes and to achieve successful educational outcomes (Dilekçi & Sezgin-Nartgün, 2020a, 2020b). This is because teachers need to adapt to changes in curricula, programs, instruction, and educational policies. At the same time, classroom management, collaboration, and meeting the diverse and changing needs of students require adaptability (Collie & Martin, 2016). Accordingly, teachers' adaptive performance is important both in terms of implementing changes in education and the nature of the teaching profession, which requires interpersonal adaptability and appropriate behaviors in variable situations. Therefore, it is pointed out that adaptability is an important criterion for effective teaching (Collie & Martin, 2016; Loughland & Alonzo, 2019). Indeed, Andres et al. (2021) found that teachers with high adaptability also had high levels of teaching performance. Brühwiler and Vogt (2020) found that teachers' adaptive teaching competencies positively affect student achievement not directly but through high-quality classroom processes. All these indicate that it is necessary for teachers to have a high level of adaptive performance. Therefore, it is important to create conditions that will ensure teachers' adaptive performance. These conditions can be created by identifying the factors that affect teachers' adaptive performance.

In related literature, it was determined that school culture (Kuş, 2023), teaching mood (Dilekçi, 2018), organizational climate, knowledge sharing behavior and innovative work behavior (Irawan & Sudibjo, 2022) affect teachers' adaptive performance. Considering the studies, it can be said that there are few studies on the factors affecting teachers' adaptive performance. However, since many individual and contextual factors can affect teachers' adaptive performance, more research is needed. Similarly, Dilekçi and Sezgin-Nartgün (2020a) stated that adaptive performance has

been neglected in the context of educational organizations and teachers and suggested more research. On the other hand, Park and Park (2019) examined the research on adaptive performance. It was pointed out that the first studies were mostly conducted in the field of psychology. They determined that the researches focused more on individual-level factors and suggested that research on contextual factors should be conducted. They also stated that the factors that increase adaptive performance should be further investigated to determine how to increase the adaptive capabilities of organizations in today's changing environments. In this respect, it was thought that conducting contextual research that affects teachers' adaptive performance is important in terms of contributing to the literature. With this in mind, in this study, the contextual factors of innovative schools and schools' openness to change are addressed. This is because the main foci of innovative schools, schools' openness to change and adaptive performance are change. Although their focal points are the same, the relationship between them is not clear. Empirical evidence is needed to elaborate this relationship.

In this study, it was aimed to examine the effect of teachers' perceptions of innovative schools and schools' openness to change on their perceptions of adaptive performance. In addition, it was thought that the findings to be obtained by examining the level of teachers' perceptions of these variables and the relationship between these variables could provide detailed information that would contribute to increasing teachers' adaptive performance. The findings of this study can contribute to the literature in terms of revealing the innovativeness and openness to change of schools and teachers' adaptive performance according to teachers. In addition, the findings of this study can provide guidance to school principals on how to direct schools' openness to change and innovative school contexts in order to increase teachers' adaptive performance. On the other hand, increasing teachers' adaptive performance is important for the success of the changes that MoNE will implement to make schools more effective. Therefore, the findings of the study can guide MoNE's policies in schools.

Literature Review

Innovative School

Organizational innovation refers to efforts to improve organizational performance by changing the status quo and creating innovations in products, processes and services. Innovative schools also refer to innovations in schools (Meizatri et al., 2023) and aim to adopt contemporary approaches in education and provide students with a more effective learning experience (Williamson & Payton, 2009). According to Turan and Cansoy (2021), innovative school refers to a holistic educational approach that includes elements such as student-centered education, developing problem-solving skills, encouraging critical thinking and integrating technology effectively. It can be said that innovative schools break the shackles of traditional teaching methods by encouraging not only students but also teachers to be constantly open to innovations. Therefore, innovative schools can also be defined as representatives of a paradigm shift within the framework of traditional education.

The prevailing climate in the school is important for schools to adopt change and redefine the educational experience, that is, to effectively transform the structure of learning institutions (Çekmecelioğlu, 2006). Stonar and Wankel (1986) drew attention to the impact of a dynamic, flexible and innovative organizational climate on the

realization of innovations. Bharadwaj (2000), on the other hand, discussed the innovative climate in relation to the support of innovative and creative behaviors of organizational members. Another point to be emphasized at this point is the importance of administrative support in the development of an innovative school. As a matter of fact, the fact that the school administration has a visionary perspective in the process of shaping schools will contribute to the formation of an innovative school climate and will be effective in eliminating possible obstacles to innovation. Because, a management that is not supportive of innovation is one of the organizational barriers to innovation (Yeşil, 2018). In addition, regulations, standards and laws that do not encourage innovation, lack of financial support for innovation or ineffective government incentives (Guo et al., 2016; Hölzl & Janger, 2014; Patanakul & Pinto, 2014) can be listed as the main organizational barriers.

Schools' Openness to Change

Employees' attitudes towards change have an important role in determining the success or failure of changes in organizations. Employees may respond to change in a positive way such as excitement and happiness or in a negative way such as fear and anxiety. In this case, employees may have positive and negative attitudes towards change. While positive attitudes ensure that the change in the organization is supported by the employees and they exhibit behaviors towards success, negative attitudes cause employees to resist change and exhibit behaviors to sabotage change efforts (Gürbüz & Bayık, 2019). Therefore, employees' openness to change is important. Because, openness to change is defined as employees' readiness for change, cognitive and emotional acceptance of change and support for change (Bozbayındır & Alev, 2018). This definition shows that openness to change reflects the behaviors required by employees' positive attitudes towards change in the form of "positive influence and support for change and its consequences" (Sinval et al., 2021, p. 2). In this respect, schools that are open to change can be stated as schools where changes are supported and behaviors that contribute to the success of changes are realized.

Schools that are open to change aim to create a structure that is more responsive to student needs and adapts to the requirements of the age. For this reason, they provide teachers with continuous professional development opportunities and encourage them to update themselves and become more responsive to student needs. At this point, teachers can fulfill their active role in the change process by being self-confident, visionary and self-efficacious individuals who are not afraid of change. However, this responsibility does not only belong to teachers. In addition to teachers, school principals are also expected to support the change success of schools in this process (Cobanoğlu, 2006). Change supportive principals play an important role in promoting educational innovation and restructuring by creating a vision for the future and building a culture of collaboration (Kareem et al., 2023). Indeed, leaders are expected to assume the responsibility of leading and facilitating the change process (Küçüksüleymanoğlu & Terzioğlu, 2017). Due to this responsibility, Çelikten (2001) emphasizes the importance of the school principal's ability to successfully manage change in order to promote change and ensure its success. In this respect, the school principal should have the knowledge and skills of what kind of changes should be made in the school, what are the processes of change, and how to make employees' reactions to change positive.

However, the school principal should accept that change is a necessity for school effectiveness. With this understanding, in order to manage the change process successfully (Canlı et al., 2015), the principal should have effective leadership qualities that positively affect teachers' openness to change (Cerit et al., 2018). They should also be in constant communication with other stakeholders of the school to control and spread innovation and change (Zacharo et al., 2018). Because the fact that the school environment also wants change, provides the necessary support for the realization of change and even pressures the school to change are among the prerequisites for change to be achieved in schools (Demirtaş, 2012).

Adaptive Performance

It is noted that there are different definitions and conceptualizations of adaptive performance in the literature. Park and Park (2019) stated that there is no consistent definition of adaptive performance as it is addressed with different variables in different organizational contexts. However, they pointed out that the common point of different definitions is that they emphasize the work behaviors necessary to adapt to changes in the work environment. Jundt et al. (2015) revealed that different conceptualizations of adaptive performance have some common points. The first one is that adaptive performance is related to exogenous changes. In other words, adaptive performance arises when new roles are adopted, new skills are acquired, knowledge, skills and behaviors are adapted to new conditions and existing work behaviors are changed in relation to changing situations. The second, adaptive performance aims to maintain the employee's level of performance or minimize the decline in performance under changing work conditions. The third, adaptive performance involves learning and implementing new behaviors in anticipation of a new change and reactively in response to a sudden change in performance. The fourth, adaptive performance involves the adaptation of the employee to interpersonal and organizational changes as a result of changes in tasks as a result of interdependencies in the organization.

Adaptive performance requires employees to engage in certain behaviors in the work environment. For example, adaptive performance requires employees to adapt to, cope with and behave appropriately in unpredictable and uncertain situations. It also requires effective management of dangerous and emergency situations by making appropriate decisions and exhibiting appropriate behaviors. It necessitates finding creative and effective solutions to problems that arise or may arise. It involves employees to exhibit harmonious behaviors by adjusting their interpersonal behaviors to enable them to work in teams. It also requires integrating into a new culture and environment by performing adaptive behaviors to different people and cultures in order to perform effectively in different cultural contexts. This needs to learn the customs, values and rules of different cultures and demonstrate appropriate behaviors. It requires employees to be willing to learn new knowledge and acquire new skills required by the changes that occur in the performance of their duties and to adapt to new work processes and procedures by learning them. It needs employees to remain calm in challenging situations that arise due to change, manage stress that may occur, avoid overreacting and calm their colleagues. It requires the ability to adjust oneself to the physical conditions in which challenging tasks will be performed (Pulakos et al., 2000). In this respect, adaptive performance emphasizes behaviors related to competency

acquisition (Shoss et al., 2012) and reveals employees' ability to make cognitive, behavioral and affective changes in accordance with changing work environments (Demirkalp, 2022; Loughland & Alonzo, 2019).

Innovative School and Schools' Openness to Change

Change can be positive or negative. Organizations can develop with positive changes and become more effective in methods and processes. Negative changes, on the other hand, can cause deviations from organizational goals and a decrease in organizational effectiveness and efficiency (Tunçer, 2013). Positive changes are expressed as innovation (Özdaşlı, 2006). In this regard, it is important to be open to change in creating an innovative school (Riveras-León & Tomàs-Folch, 2020). Organizations that are open to change create a social context that enables employees to engage in proactive behaviors towards change and interact due to changes. It also creates an organizational climate that supports creativity. Such environments encourage employees to explore, take action and perform more innovatively (Curşeu et al., 2022). On the other hand, supporting innovation increases openness to change (Alayoğlu, 2019). In this respect, it can be stated that schools where innovations can be realized are open to change.

Innovative School and Adaptive Performance

Effective development and innovation practices in organizations depend on employees' readiness for and reaction to change (Töremen, 2002). Innovations can be successfully realized with individuals who are aware of their own knowledge and skills, can adapt to innovations and have learned to learn (Yüner & Özdemir, 2020). From this point of view, teachers' adaptive behaviors to change can contribute to the creation of a suitable environment for the realization of innovations in schools. On the other hand, in organizational environments where new ideas are supported, employees are more likely to take responsibility for change and innovation ideas. Because, an innovative organizational environment encourages employees to take responsibility in the change process and adapt to changing contexts by supporting, rewarding and empowering them (Park & Park, 2019). In respect to this, innovative schools can enable teachers to perform behaviors that are adaptive to change.

Schools' Openness to Change and Adaptive Performance

The reason why changes in organizations do not achieve the intended results is usually the failure of implementation. It is stated that change initiatives will fail especially when the attitudes and behaviors of individuals towards change are not sufficiently taken into account. The success of change can be possible by changing the attitudes and behaviors of employees positively in appropriate ways (Gürbüz & Bayık, 2019). Because successful changes can be realized together with employees and by taking into account the quality of employees. In this respect, organizations that can manage their human resources well can adapt to change more easily (Tunçer, 2012). Employees' adaptation to change can be achieved by being tolerant to changing conditions even in crisis situations and having an open attitude to change (Oganisjana et al., 2023). In this respect, teachers in schools open to change can be expected to adapt to change more easily.

Purpose of the Study

In this study, it was aimed to examine the effect of teachers' perceptions of innovative schools and schools' openness to change on their perceptions of adaptive performance. For this purpose, answers to the following questions were sought:

- 1. What is the level of teachers' perceptions of innovative schools, schools' openness to change and adaptive performance?
- 2. Is there a significant relationship between teachers' perceptions of innovative schools, schools' openness to change and adaptive performance?
- 3. Do teachers' perceptions of innovative schools significantly predict their perceptions of adaptive performance?
- 4. When the possible effects of teachers' perceptions of innovative schools are controlled, do their perceptions of schools' openness to change significantly predict their perceptions of adaptive performance?
- 5. Do teachers' perceptions of innovative schools and schools' openness to change together significantly predict their perceptions of adaptive performance?

Method

Research Design

In this study, a predictive correlational design belonging to the correlational survey model was used. Correlational survey is a research model designed to determine whether the variables in the study change together (Karasar, 2023), that is, whether there is a relationship between them and to explain the type of this relationship (Christensen et al., 2015) and to make predictions about the variables in question (Gliner et al., 2015). Predictive correlational design is a research design that allows to explain the changes in the dependent variable caused by the independent variable (Büyüköztürk et al., 2016).

Participants

Simple random sampling method was used to determine the sample in the study. Simple random sampling method, which is widely used in scientific researches, is used when the homogeneity of the universe is high. In this method, the individuals to be selected for sampling are randomly selected and the probability of sampling individuals in the universe is equal (Noor et al., 2022). The sample of this study consisted of 258 teachers working in public secondary schools in Niğde province in the 2020-2021 academic year. The demographic information of the participants is shown in Table 1.

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Variable	Group	N	%
	Female	173	67.1
Gender	Male	85	32.9
Marital Status	Married	172	66.7
Marital Status	Single	86	33.3
	Social sciences	93	36.0
Branch	Science	71	27.5
	Other	94	36.4
Educational Level	Undergraduate	234	90.7
	Graduate	24	9.3
	Center	135	52.3

Table 1

Demographic Information of the Participants

Districts

According to the Table 1, of the teachers, 67.1% (n=173) were female and 32.9% (n=85) were male. 66.7% (n=172) were married and 33.3% (n=86) were single. The branch variables of the teachers were grouped as social sciences (Social Sciences, Turkish and English), science (Science and Mathematics) and other (Visual Arts, Technology and Design, Religious Culture and Moral Knowledge, etc.). Of the teachers, 36% (n=93) were in social sciences, 27.5% (n=71) in science and 36.4% (n=94) in other fields. The educational level of the teachers was 90.7% (n=234) undergraduate and 9.3% (n=24) postgraduate. 52.3% (n=135) of the teachers work in the provincial centre and 47.7% (n=123) work in schools located in the districts.

123

258

Data Collection Tools

Location of School

Total

Personal Information Form, Innovative School Scale, Schools' Openness to Change Scale and Teachers' Perceived Adaptive Performance Scale were used to collect the research data.

Personal Information Form

It was used to collect information about teachers' educational status, gender, marital status, branch and the environment in which the school is located.

Innovative School Scale

It was used to determine teachers' perceptions about the innovation levels of schools. The scale was developed by Aslan and Kesik (2016). The scale has 19 items and three sub-dimensions (*Administrative support*, *Innovative atmosphere and Organizational impediments*). The total variance explained by the sub-dimensions in the scale is 62.70%. The fit index values of the scale are $x^2=360.38$, Sd=146, $x^2/Sd=2.46$, GFI=.90, AGFI=.87, NNFI=.97, NFI=.95, CFI=.97, RMSEA=.055, SRMR=.069. The Cronbach's Alpha value of the scale is .85 (Aslan & Kesik, 2016). In this study, the

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Cronbach's Alpha value of the scale was found to be .93. The rating intervals in the scale are "Never (1), Rarely (2), Sometimes (3), Most of the time (4), Always (5)". In the interpretation of teachers' perceptions, "low" for 1-2.33, "moderate" for 2.34-3.66 and "high" for 3.67-5 were evaluated.

Schools' Openness to Change Scale

It was used to determine teachers' perceptions of their schools' openness to change. The scale was developed by Smith and Hoy (2007) and adapted into Turkish by Demirtaş (2012). The scale consists of a total of 14 items and three sub-dimensions (*Teachers' openness to change, Principals' openness to change, and School environment's press for change*). The total variance of the subscales in the scale is 59.32%. The total variance of the sub-dimensions in the scale is 59.32%. Cronbach's Alpha value of the scale is .78 (Demirtaş, 2012). In this study, Cronbach's Alpha value of the scale was found as .62. The rating intervals in the scale are "I completely disagree (1), I partially agree (2), I moderately agree (3), I mostly agree (4) and I completely agree (5)". In the interpretation of teachers' perceptions, "low" for 1-2.33, "moderate" for 2.34-3.66 and "high" for 3.67-5 were evaluated.

Teachers' Perceived Adaptive Performance Scale

It was used to determine teachers' perceptions of adaptive performance. The scale is the "Adaptive Performance" sub-dimension of the "Teachers Perceived Job Performance Scale/TPJP" scale developed by Bhat and Beri (2016). This sub-dimension was adapted into Turkish by Dilekçi and Sezgin-Nartgün (2020b). The scale consists of a total of 18 items and three sub-dimensions (*Inability to cope with problems, Managing unexpected situations, Interpersonal and cultural adaptability*). The total variance explained by the sub-dimensions is 55.53%. The fit index values of the scale are $x^2=418.53$, Sd=132, $x^2/Sd=3.17$, GFI=.90; AGFI=.87; CFI=.97; NFI=.95; NNFI=.96; IFI=.97; RFI=.95. The Cronbach's Alpha value of the scale is .88 (Dilekçi & Sezgin-Nartgün, 2020b). In this study, the Cronbach's Alpha value of the scale is .79. The rating intervals in the scale are "Never (1), Rarely (2), Occasionally (3), Frequently (4), Always (5)". In the interpretation of teachers' perceptions, "low" for 1-2.33, "moderate" for 2.34-3.66 and "high" for 3.67-5 were evaluated.

Data Collection Process

Before the data were collected Nigde Omer Halisdemir University Ethics Committee with the decision dated 28/07/2020 and numbered 07/01 and research permission was obtained from Niğde Provincial Directorate of National Education. Data collection tool was sent to 463 teachers working in public secondary schools in Niğde province. Due to the Covid-19 pandemic, data were collected online (message and e-mail). Feedback was received from 289 teachers.

Analysing the Data

Firstly, the data were analysed for outliers. The 31 measurement tools with outliers were not included in the analysis. The data analysis continued with the remaining 258 measurement tools. In order to decide on the analyses to be used, skewness and kurtosis values of the data were determined. Skewness and kurtosis values of the data are given in Table 2.

Table 2			
Skewness	and Kurtosis	Values	of the Data

Scales and Dimensions	Skewness	Kurtosis
Innovative Atmosphere	-1.095	1.216
Administrative Support	763	055
Organizational Impediments	.407	277
Innovative School Scale	412	570
Teachers' Openness to Change	872	.900
Principals Openness to Change	752	1.674
School Environment's Press for Change	588	404
Schools' Openness to Change	553	376
Managing Unexpected Situations	-1.084	1.096
Interpersonal and Cultural Adaptability	-1.941	2.907
Inability to Cope with Problems	.934	.904
Adaptive Performance Scale	854	.617

The skewness and kurtosis values indicated in Table 2 are within the values accepted for normal distribution of the data (Kline, 2011). Therefore, parametric tests were used in the data analysis. Descriptive statistical analysis was conducted for the first sub-problem of the research. The results of Pearson correlation analysis were utilized for the second sub-problem of the research. Hierarchical regression analysis was performed for the third, fourth, and fifth sub-problems of the research. Durbin-Watson values of 1.961 indicated no autocorrelation (Field, 2009). The correlation values between independent variables were less than .90. Tolerance values ranged from .216 to .897. VIF values ranged from 1.115 to 4.629. These values indicated no multicollinearity problem (Çokluk et al., 2012). In correlation analysis, values between 0.70-1.00 were interpreted as "high"; 0.69-0.30 as "moderate"; and 0.29-0.00 as "low" level. In regression analysis, values less than .09 were considered "low", values between .09 and .48 as "moderate", and values above .49 as "high" effect (Büyüköztürk, 2012).

Results

Descriptive statistical analysis was performed to determine the level of teachers' perception of innovative schools, schools' openness to change and adaptive performance. The results of the descriptive statistical analysis are presented in Table 3.

Table 3

Teachers' Perception of Innovative School, Schools' Openness to Change and Adaptive Performance

Scales	n	Min.	Мах.	$ar{X}$	sd	Level
Innovative atmosphere	258	9	30	4.29	4.25	High
Admisnistrative support	258	15	35	4.30	4.62	High

Organizational impediments	258	6	30	2.44	5.56	Moderate
Innovative School Scale	258	41	95	4.06	12.27	High
Teachers' openness to change	258	5	25	4.15	3.59	High
Principals openness to change	258	14	21	2.97	1.23	Moderate
School environment's press for change	258	6	15	4.18	2.02	High
Schools' Openness to Change Scale	258	38	59	3.65	5.08	Moderate
Managing unexpected situations	258	19	35	4.53	3.17	High
Interpersonal and cultural adaptability	258	21	25	4.88	1.04	High
Inability to cope with problems	258	6	21	1.61	3.09	Low
Adaptive Performance Scale	258	57	85	4.33	5.42	High

Table 3 shows that teachers' perceptions of innovative school (\bar{X} =4.06) and adaptive performance (\bar{X} =4.33) are at "high" level, while their perceptions of schools' openness to change (\bar{X} =3.65) are at "moderate" level. When the sub-dimensions of the innovative school scale are examined, teachers' perceptions of innovative atmosphere (\bar{X} =4.29) and administrative support (\bar{X} =4.30) are at "high" level, while their perceptions of organizational impediments (\bar{X} =2.44) are at "moderate" level. When the sub-dimensions of the schools' openness to change scale were analysed, the perceptions of the teachers on the school environment's press for change (\bar{X} =4.18) and teachers' openness to change (\bar{X} =4.15) were "high", while the perceptions of the teachers on the principals' openness to change (\bar{X} =2.97) were "moderate". When the sub-dimensions of the adaptive performance scale are analysed, teachers' perceptions of managing unexpected situations (\bar{X} =4.53) and interpersonal and cultural adaptability (\bar{X} =4.88) are at "high" level, while their perceptions of inability to cope with problems (\bar{X} =1.61) are at "low" level.

Correlation analysis was performed to determine whether there was a significant relationship between teachers' perceptions of innovative schools, schools' openness to change and adaptive performance. The results of the correlation analysis are presented in Table 4.

Table 4

Relationship between Teachers' Perceptions of Innovative Schools, Schools' Openness to Change, and Adaptive Performance

Scales	Innovative School Scale	Schools' Openness to Change Scale	Adaptive Performance Scale
Innovative School Scale	1		
Schools' Openness to Change Scale	.734**	1	
Adaptive Performance Scale	.551**	.588**	1

^{**}p<.01

Table 4 shows that there is a positive and moderately significant relationship between teachers' perceptions of innovative schools and adaptive performance (r=.551, p<.01). There is a positive and moderately significant relationship between teachers' perceptions of adaptive performance and schools' openness to change (r=.588, p<.01). There is a positive and highly significant relationship between teachers' perceptions of innovative schools and schools' openness to change (r=.734, p<.01).

Hierarchical regression analysis was performed to determine whether teachers' perceptions of innovative schools and schools' openness to change are significant predictors of adaptive performance perceptions. The results of the hierarchical regression analysis are shown in Table 5.

Table 5

Predictiveness of Teachers' Perceptions of Innovative School and Schools' Openness to Change Perceptions of Adaptive Performance

Model	Variable (Analysis of adaptive performance scale)	В	Standard Error _s	β	t	p
	Constant	66.933	2.707		24.722	.000*
	Innovative Atmosphere	.052	.122	.041	.424	.672
1	Admisnistrative Support	.435	.116	.371	3.742	.000*
	Organizational Impediments	225	.059	231	-3.833	.000*
	$R=.558$ $R^2=.312$ $R^2\Delta$	=.312 $F(3,$,254)=38.366***	$F\Delta(3,254)=3$	38.366***	
2	Constant	57.316	5.668		10.111	.000*
	Innovative Atmosphere	102	.125	080	814	.416
	Admisnistrative Support	.232	.124	.198	1.861	.064
	Organizational Impediments	149	.058	153	-2.548	.011*
	Teachers' Openness to Change	.310	.118	.205	2.626	.009*
	Principals Openness to Change	.170	.230	.039	.742	.459
	School Environment's Press for Change	.727	.199	.272	3.648	.000*
	$R=.624$ $R^2=.389$ $R^2\Delta=$	=.624 R^2 =.389 $R^2\Delta$ =.077 $F(6,251)$ =26.607***).530***	

Model 1 in Table 5 shows that teachers' perceptions of innovative schools predicted their perceptions of adaptive performance significantly (R=.558, R²=.312) (Fmodel 1(3-254)=38.366, p<.001). Teachers' perceptions of innovative school explained 31.2% of the variance of adaptive performance perceptions. Teachers' perceptions of *Administrative support* and *Organizational impediments* dimensions are

significant predictors of adaptive performance perceptions, while *Innovative* atmosphere dimension is not a significant predictor. The regression equation for Model 1 was determined as "Adaptive performance=66.933+.435Administrative support-.225Organizational impediments". A one-unit increase in teachers' perceptions of the dimension of Administrative support leads to a .435 (43.5%) unit increase in their adaptive performance. A one-unit increase in teachers' perceptions of Organizational impediments dimension leads to a .225 (22.5%) unit decrease in their adaptive performance. Accordingly, teachers' perceptions of Administrative support dimension affect their adaptive performance perceptions the most.

According to Model 2, teachers' perceptions of innovative school and schools' openness to change together predict their adaptive performance perceptions significantly (R=.624, $R^2=.389$) (Fmodel 2(6-251)=26.607, p<.001). Teachers' perceptions of innovative schools and schools' openness to change together explained 38.9% of the variance of adaptive performance perceptions. Moreover, when the possible effects of teachers' perceptions of innovative schools were controlled, teachers' perceptions of schools' openness to change predicted their perceptions of adaptive performance significantly ($R^2\Delta = .077$) ($F\Delta$ (3, 251)=10.530, p<.001). When the possible effects of teachers' perceptions of innovative schools were controlled, perceptions of schools' openness to change explained 7.7% of the variance of adaptive performance perceptions. According to Model 2, teachers' perceptions of Organizational impediments, Teachers' openness to change and School environment's press for change are significant predictors of adaptive performance perceptions. The regression equation for Model 2 was determined as "Adaptive performance=57.316-.149. Organizational impediments+.310Teachers' openness to change+School environment's press for change". One unit increase in teachers' perceptions of Organizational impediments dimension causes .149 (14.9%) unit decrease in teachers' perceptions of adaptive performance. One unit increase in teachers' perceptions of Teachers' openness to change dimension causes .310 (31%) unit increase in teachers' perceptions of adaptive performance. A one-unit increase in teachers' perceptions of School environment's press for change leads to a .727 (72.7%) unit increase in teachers' adaptive performance perceptions. Accordingly, while teachers' perceptions of *Innovative school and Schools*' openness to change are together, the perceptions of School environment's press for change affect their adaptive performance perceptions the most.

Discussion

Adaptability, which enables successful adaptation to changing conditions (Collie & Martin, 2016), is an important employee characteristic for organisations that adopt a flexible, efficient and innovative structure to ensure their continuity in global competitive conditions. This characteristic is considered within the scope of adaptive performance (Shoss et al., 2012). In this respect, adaptive performance emphasises the adaptability of employees to the changes occurring in the work environment (Park & Park, 2019). In this study, it was aimed to examine the effect of teachers' perceptions of innovative schools and schools' openness to change on their perceptions of adaptive performance. Firstly, the level of teachers' perceptions of innovative schools, schools' openness to change and adaptive performance were analysed. It was determined that teachers' perceptions of innovative schools were at a high level. This may indicate that

there is a high level of innovation in schools. It is imperative for schools to be innovative. This necessity stems from the fact that they assume the responsibility of raising individuals suitable for changing world conditions (Bodur & Argon, 2019). However, there are studies in the literature that determine that teachers' perceptions of innovative schools are at high level (Çayak & Erol, 2022) and moderate level (Akyürek, 2022; Bodur & Argon, 2019). On the other hand, it was determined that teachers' perceptions of the *Innovative atmosphere* and *Administrative support* dimension were high, while their perceptions of the *Organizational impediments* dimension were at a moderate level. This situation is also supported by Bodur and Argon (2019). Therefore, it can be stated that there is a high level of innovative atmosphere in schools and a high level of administrative support for innovations in schools, but there are some situations that prevent the realisation of innovations in schools.

Since schools are greatly affected by modernisation as a social system, schools should be open to change. In particular, school principals are expected to play important roles in how to initiate, implement and institutionalise change in the context of innovations in schools by emphasising that school principals are change agents. School principals should convince the employees that the change will be beneficial for them, produce solutions to the problems encountered in the change process and facilitate the change process (Meizatri et al., 2023). However, in this study, it was determined that teachers' perceptions of schools' openness to change were at a moderate level. Accordingly, it can be stated that schools are open to change but this is not enough. In the literature, there are different results regarding the openness of schools to change. Avşar et al. (2022) determined the openness of schools to change at low level, while Cağlar (2013, 2014) and Küçüksüleymanoğlu and Terzioğlu (2017) determined it at moderate level. On the other hand, in this study, teachers' perceptions of School environment's press for change and Teachers' openness to change were found to be high, and Principals' openness to change were found to be moderate. This may indicate that the environment of the schools creates a high level of change pressure on the schools and that the teachers perceive the changes positively at a high level, while the principals do not perceive the changes in the schools positively enough. However, Çağlar (2013, 2014) and Demirtaş (2012) found that principals' openness to change was higher than the change pressure of the school environment and teachers' openness to change. Küçüksüleymanoğlu and Terzioğlu (2017) found that the change pressure of the school environment was low and the openness of teachers and principals to change was at a moderate level. Canlı et al. (2015) found that school administrators were mostly prone to change.

Teachers have to adapt and modify their teaching to meet the diverse cultural, linguistic and instructional needs of their students (Vaughn et al., 2016). This has necessitated adaptability to be an important characteristic for teachers in the complex world of education. Teachers' adaptability is changing their practices in variable, new and uncertain situations (Loughland & Alonzo, 2019). Adaptive performance, on the other hand, refers to engaging in appropriate work behaviours in anticipation of or in response to changes that may occur in their tasks (Jundt et al., 2015). In this study, it was determined that teachers' perceptions of adaptive performance were at a high level. This may indicate that teachers adapt to the changing work environment and conditions at a high level. On the other hand, in this study, teachers' perceptions in the dimensions

of Managing unexpected situations and Interpersonal and cultural adaptability were found to be high, while their perceptions in the dimension of Inability to cope with problems were found to be low. Dilekçi and Sezgin-Nartgün (2020b) also reached similar results. This finding of the study may indicate that teachers have a high level of ability to cope with unexpected situations, manage crisis situations and cope with various problems in the work environment. It may also indicate that they have harmonious relationships with other people in the school and have a high level of sensitivity to different cultures.

In this study, it was determined that innovative schools significantly predicted teachers' adaptive performance. Innovative schools had a moderate effect on teachers' adaptive performance. As a matter of fact, the results of the correlation analysis also revealed that there was a positive and moderately significant relationship between innovative schools and teachers' adaptive performance. Accordingly, based on the results of both correlation and regression analyses, it can be said that teachers' adaptive performance increases as innovations are implemented in schools. However, only Administrative support and Organizational impediments dimensions were found to be significant predictors of teachers' adaptive performance. However, Administrative support dimension was a positive predictor and Organizational impediments dimension was a negative predictor. This shows that Administrative support causes an increase in teachers' adaptive performance, while Organizational impediments cause a decrease. Accordingly, it can be said that when administrative support is provided for innovations in schools, teachers' adaptive performance increases. However, when there are factors that prevent the realisation of innovations in schools, it can be stated that teachers' adaptive performance decreases. However, the Administrative support dimension had the most effect on teachers' adaptive performance. Similarly, Irawan and Sudibjo (2022) found that innovative work behaviour had a positive effect on employees' adaptive performance.

In this study, when the possible effects of innovative schools were controlled, schools' openness to change significantly predicted teachers' adaptive performance. This shows that when the possible effects of innovative schools are controlled, schools' openness to change affect teachers' adaptive performance. When the possible effects of innovative schools were controlled, schools' openness to change had a low effect on teachers' adaptive performance. Similarly, Visser (2012) determined that attitude towards change affects adaptive performance. Schulz (2010) determined that willingness to change affects adaptive performance. On the other hand, the results of the correlation analysis in this study revealed that there was a positive and moderately significant relationship between schools' openness to change and teachers' adaptive performance. Hashemi et al. (2019) also found a positive and moderate relationship between openness to change and adaptive performance. Schulz (2010) and Visser (2012) found a positive and moderate relationship between willingness to change and adaptive performance.

In this study, although the results of the correlation analysis showed a moderate relationship, the low effect in the regression analysis may be due to the control of the possible effects of innovative school perceptions. As a matter of fact, in this study, a positive and highly significant relationship was found in the correlation analysis results of the relationship between innovative schools and schools' openness to change.

Similarly, Çayak and Erol (2022) found a positive and highly significant relationship between teachers' perceptions of readiness for change and innovative schools. Due to this relationship, when the possible effects of innovative schools are controlled, schools' openness to change may have had a low impact on teachers' adaptive performance. However, based on the results of both correlation and regression analyses, it can be said that positive perceptions of changes in schools increase teachers' adaptive performance. The fact that the psychological readiness and behavioural intention supporting change indicated by openness to change can guide subsequent behaviours (Yue et al., 2019) may enable openness to change to be an indicator of teachers' adaptive performance.

In this study, innovative schools and schools' openness to change together significantly predicted teachers' adaptive performance. Accordingly, the realisation of innovations in schools and positive attitudes towards change in schools affect teachers' adaptive performance. Innovative schools and schools' openness to change moderately affected teachers' adaptive performance. While innovative schools and schools' openness to change together, Organizational impediments, Teachers' openness to change and School environment's press for change were significant predictors of teachers' adaptive performance. However, Organizational impediments were negative, Teachers' openness to change and School environment's press for change were positive predictors. This shows that Organizational impediments cause a decrease in teachers' adaptive performance, while Teachers' openness to change and School environment's press for change cause an increase. Accordingly, it can be stated that when there are factors that prevent the realisation of innovations in schools, teachers' adaptive performance decreases, while teachers' and school environment's positive acceptance of change increases teachers' adaptive performance. However, School environment's press for change dimension had the highest effect on teachers' adaptive performance. This may indicate the importance of school environment in shaping teachers' behaviours. It can be said that the change demands and expectations created by the school environment are more important than teachers' openness to change in increasing teachers' adaptive performance.

Conclusion and Recommendations

The results of this study showed that the school's openness to change affects adaptive performance when the possible effects of innovative school are controlled and innovative school affects administrative performance. However, it was determined that the innovative school and the school's openness to change together affect adaptive performance. The effect values revealed that these two variables together affect adaptive performance more. Accordingly, in order to increase teachers' adaptive performance, both innovative practices in schools and schools' openness to change should be increased. However, in this study, although it was determined that there is a high level of *Innovative atmosphere* in schools and a high level of *Administrative support* for innovations in schools, it was concluded that there are some situations that prevent the realisation of innovations in schools. Conducting qualitative studies to determine the factors that prevent the realisation of innovations in schools can contribute to the removal of these obstacles. On the other hand, the fact that teachers' perceptions of *Principals' openness to change* dimension in this study were at a moderate level may indicate that the principals did not meet the change in schools positively enough. In this

respect, qualitative studies can be conducted to reveal the factors that determine the factors that prevent principals' openness to change.

In this study, it was determined that organizational impediments caused a decrease in teachers' adaptive performance, while teachers' openness to change and the school environment's press for change caused an increase. Accordingly, it is important to eliminate the factors preventing the realisation of innovations in schools, to increase the openness of teachers to change and the school environment's press to change in order to increase the adaptive performance of teachers. School principals are recommended to eliminate the factors preventing the realisation of innovations and encourage innovations. Many individual and organisational factors affecting teachers' innovative behaviours have been investigated. The most frequently researched topic in organisational factors is leadership (Zainal & Matore, 2019). In this respect, school principals can increase innovation in schools through appropriate leadership behaviours. For example, principals' exhibiting change leadership can contribute to the realisation of innovations in schools by ensuring that school staff, especially teachers, are ready for change (Meizatri et al., 2023). In addition, school principals can contribute to the innovation of schools by exhibiting democratic leadership (Akyürek, 2022), supporting teachers and avoiding restrictive behaviours (Bodur & Argon, 2019). In addition, the Ministry of National Education can implement various practices in schools by determining policies to eliminate the factors that prevent the realisation of innovations in schools. For this purpose, the Ministry of National Education can initiate new practices in schools, give the necessary authority and budget support for new practices to be carried out in schools, and give various awards to teachers and administrators who carry out new projects to encourage innovation in schools.

Employees who are open to change and equipped are the greatest wealth of organisations (Tuncer, 2012). The school principal should be aware of this. With this awareness, firstly, he/she should be open to change. Then, he/she should see increasing the school's openness to change as a fundamental responsibility. In this context, school principals' acquisition of effective leadership qualities can increase teachers' openness to change (Cerit et al., 2018). The school principal's exhibiting transformational leadership and creating a compassionate communication in the school can positively affect employees' openness to change by increasing their organisational trust (Yue et al., 2019). School principals can increase openness to change by involving school stakeholders in the change process, providing information about change and its consequences, making them feel the need for change, and increasing their self-efficacy to cope with change (Lenberg et al., 2017; Wanberg & Banas, 2000). In addition, employees' not believing in the benefits of change and their fears that they may be harmed by change are the reasons for resistance to change (Helvaci, 2011). In order for employees to adopt change and to be encouraged when necessary, ensuring that they believe that change will be beneficial for the organisation and themselves (Töremen, 2002) can increase openness to change.

This study has made important contributions in terms of revealing the contextual factors affecting teachers' adaptive performance. In addition, it has made important contributions on how the contexts of innovative schools and schools' openness to change can be used to increase teachers' adaptive performance. However, this research has some limitations. This research is limited to the responses of the teachers in the

sample to the data collection tools. Similar research can be conducted with different samples and data collection tools. In this study, it was not determined how the innovative school would affect adaptive performance when the possible effects of schools' openness to change were controlled. The role of innovative school as a mediating variable in the relationship between schools' openness to change and adaptive performance was not determined. These situations can be analysed in future studies. On the other hand, the influence of these three variables on each other can be analysed from different aspects. Studies examining the mediating effect of one of the variables between these three variables can be conducted. With such studies, it can be contributed to reveal the relationships between the three variables more clearly.

Statement of Responsibility

Corresponding author is responsible for literature review, methodology, data collection, data analysis, resources, writing-original draft. Author 2 is responsible for investigation, literature review, writing-review& editing, supervision.

Conflicts of Interest

There is no conflict of interest between authors.

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References

- Akyürek, M. İ. (2022). The relationship between the innovative school and the democratic leadership characteristics of administrators. *Journal of Social Sciences of Kahramanmaraş Sütçü İmam University*, 19(1), 1-11. https://doi.org/10.33437/ksusbd.912763
- Alayoğlu, A. H. (2019). Relationship between innovation climate, creative self efficacy and openness to change (Thesis No: 576618). [Master thesis, Marmara University]. Council of Higher Education National Thesis Center.
- Andres, L. M., Cruz, J. B. D., Gonzaga, M. P., Rodriguez, I. S., Sanchez, J. A., & Ortiz, A. F. (2021). Teachers' level of adaptability and performance: Their response to the rapidly transforming academic world. *International Journal of English Literature and Social Sciences*, 6(3), 326-331. https://dx.doi.org/10.22161/ijels.63.46
- Aslan, H., & Kesik, F. (2016). Development of innovative school scale: A validity and reliability analysis. *Educational Administration in Theory and Practice*, 22(4), 463-482.

- Avşar, D. Ş., İnandı, Y., & Arslantaş, H. İ. (2022). Examining the relationship between the level of self-efficacy of teachers and the level of schools' openness to change. *i-Manager's Journal on Educational Psychology*, 15(3), 11-20. https://doi.org/10.26634/jpsy.15.3.18621
- Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, 24(1), 169-196. https://doi.org/10.2307/3250983
- Bhat, S. A., & Beri, A. (2016). Development and validation of teachers perceived job performance scale (TPJP) in higher education. *Man in India*, 96(4), 935-944.
- Bodur, E., & Argon, T. (2019). Teachers' views on innovative schools and organization climate. *International Journal of Leadership Training*, *1*(1), 75-88.
- Bozbayındır, F., & Alev, S. (2018). The analysis of the relationship between self-efficacy, proactive personality and openness to change perceptions teachers. *İnönü University Journal of the Faculty of Education*, 19(2), 293-311. https://doi.org/10.17679/inuefd.346666
- Brühwiler, C., & Vogt, F. (2020). Adaptive teaching competency: Effects on quality of instruction and learning outcomes. *Journal for Educational Research Online*, 12(1), 119-142.
- Büyüköztürk, Ş. (2012). Sosyal bilimler için veri analizi el kitabı [The data analysis handbook for social sciences]. Pegem Academy.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2016). *Bilimsel araştırma yöntemleri* [Scientific research methods]. Pegem Academy.
- Çağlar, Ç. (2013). The relationship between the schools' level of openness to change and the teachers' level of organizational commitment. *Adıyaman University Journal of Social Sciences*, 15, 119-150.
- Çağlar, Ç. (2014). The relationship between academic optimism levels of schools and their levels of openness to change. *Journal of Theoretical Educational Science*, 7(1), 94-113.
- Canlı, S., Demirtaş, H., & Özer, N. (2015). School administrators' tendencies towards change. *Elementary Education Online*, *14*(2), 634-646.
- Çayak, S., & Erol, İ. (2022). The relationship between teachers' levels of readiness for change and the innovativeness levels of schools. *Ahi Evran University Journal of Kurşehir Education Faculty*, 23(2), 1529-1558.
- Çekmecelioğlu, H. G. (2006). Örgüt iklimi, duygusal bağlılık ve yaratıcılık arasındaki ilişkilerin değerlendirilmesi: Bir araştırma [Evaluation of the relationships between organizational climate, affective commitment and creativity: A research]. *Atatürk University Journal of Economics and Administrative Sciences*, 20(2), 295-310.
- Çelikten, M. (2001). School directors' skills in the management of change. *Education and Science*, 26(119), 14-19.
- Cerit, Y., Kadıoğlu-Ateş, H., & Kadıoğlu, S. (2018). The relationship between effective leadership qualities and classroom teachers' openness to change. *Kalem International Journal of Education and Human Sciences* 8(1), 105-129.

- Charbonnier-Voirin, A., & Roussel, P. (2012). Adaptive performance: A new scale to measure individual performance in organizations. *Canadian Journal of Administrative Sciences*, 29(3), 280-293. https://doi.org/10.1002/CJAS.232
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2015). *Araştırma yöntemleri desen ve analiz* [Research methods design and analysis]. (A. Aypay, Trans. Ed.). Anı Publications.
- Çobanoğlu, Ü. (2006). Teachers' perceptions toward the frequencies of principal behaviors supporting organizational change. (Thesis No:210899). [Master thesis, Pamukkale University]. Council of Higher Education National Thesis Center.
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2012). Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları [Multivariate statistics for social sciences: SPSS and LISREL applications]. Pegem Academy.
- Collie, R. J., & Martin, A. J. (2016). Adaptability: An important capacity for effective teachers. *Educational Practice and Theory*, 38(1), 27-39. http://dx.doi.org/10.7459/ept/38.1.03
- Curşeu, P. L., Schruijer, S. G. L., & Fodor, O. C. (2022). Minority dissent, openness to change and group creativity. *Creativity Research Journal*, 34(1), 93-105. https://doi.org/10.1080/10400419.2021.2018833
- Demirkalp, S. (2022). *Investigation of business skills and qualifications in use of basic technology according to teacher's features* (Thesis No: 753076). [Master thesis, Aksaray University]. Council of Higher Educaion National Thesis Center
- Demirtaş, H. (2012). Primary schools' openness to change. *Elementary Education Online*, 11(1), 18-34.
- Dilekçi, Ü. (2018). *Instructional emotions of teachers and their perceived adaptive performances* (Thesis No: 511262). [Doctoral dissertation, Bolu Abant İzzet Baysal University]. Council of Higher Educaion National Thesis Center.
- Dilekçi, Ü., & Sezgin-Nartgün, Ş. (2020a). Adaptive performance as a dimension of job performance: A theoretical framework. *Ankara University Journal of Faculty of Educational Sciences*, *53*(1), 301-328. https://doi.org/10.30964/auebfd.560443
- Dilekçi, Ü., & Sezgin-Nartgün, Ş. (2020b). Adaptation of teachers' perceived adaptive performance scale to Turkish culture: Validity reliability and descriptive analysis. *Hacettepe University Journal of Education*, 35(2), 448-465. https://doi.org/10.16986/HUJE.2019052615
- Field, A. (2009). Discovering statistics using SPSS. Sage.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2015). *Uygulamada araştırma yöntemleri: Desen ve analizi bütünleştiren yaklaşım [Research methods in applied settings: An integration approach to design and analysis].* (S. Turan, Trans. Ed.). Nobel Publications.
- Guo, D., Guo, Y., & Jiang, K. (2016). Government-subsidized R&D and firm innovation: Evidence from China. *Research Policy*, 45(6), 1129-1144. https://doi.org/10.1016/j.respol.2016.03.002
- Gürbüz, S., & Bayık, M. E. (2019). Motivation, openness to experience, and affective commitment: The mediating role of attitudes towards change. *Turkish Journal of Psychology*, 34(Special Issue), 4-21.

- Hashemi, S. E., Asheghi, M., & Naami, A. (2019). Relationship of mindfulness and cognitive defusion to burnout, openness to change and adaptive performance with mediating role of psychological flexibility: A case study of iran south railway company. *NeuroQuantology*, 17(6), 22-29.
- Helvacı, M. A. (2011). Developing the reasons of the resistance to changes evaluation scale. *e-Journal of New World Sciences Academy*, 6(3), 2033-2047.
- Hölzl, W., & Janger, J. (2014). Distance to the frontier and the perception of innovation barriers across European countries. *Research Policy*, 43(4), 707-725. http://dx.doi.org/10.1016/j.respol.2013.10.001
- Irawan, R., & Sudibjo, N. (2022). Employee adaptive performance in Sekolah musik Indonesia: The impact of organizational climate, knowledge sharing behavior and innovative work behavior. *Educational Management*, 11(1), 53-66.
- Jundt, D. K., Shoss, M. K., & Huang, J. L. (2015). Individual adaptive performance in organizations: A review. *Journal of Organizational Behavior*, *36*, 53-71. https://doi.org/10.1002/job.1955
- Karasar, N. (2023). Bilimsel araştırma yöntemi [Scientific research method]. Nobel Academic Publication.
- Kareem, J., Patrick, H. A., Prabakaran, N., B., V., Tantia, V., M. P. M., P. K., & Mukherjee, U. (2023). Transformational educational leaders inspire school educators' commitment. *Frontiers. Education*, 8, 1-10. https://doi.org/10.3389/feduc.2023.1171513
- Kline, R. B. (2011). *Methodology in the social sciences: Principles and practice of structural equation modeling.* Guilford Press.
- Küçüksüleymanoğlu, R., & Terzioğlu, C. (2017). Secondary school teachers' perceptions on their school's openness to change. *Educational Research and Reviews*, 12(15), 732-743.
- Kuş, A. (2023). *Investigation of school culture and adaptable performances perceived by class teachers* (Thesis No: 791351). [Master Thesis, Çukurova Üniversitesi]. Council of Higher Education National Thesis Center.
- Lenberg, P., Wallgren-Tengberg, L. G., & Feldt, R. (2017). An initial analysis of software engineers' attitudes towards organizational change. *Empirical Software Engineering*, 22, 2179-2205. https://doi.org/10.1007/s10664-016-9482-0
- Loughland, T., & Alonzo, D. (2019). Teacher adaptive practices: A key factor in teachers' implementation of assessment for learning. *Australian Journal of Teacher Education*, 44(7), 17-30. https://doi.org/10.14221/ajte.2019v44n7.2
- Meizatri, R., Rusdinal, R., & Rifma, R. (2023). Confirmatory factors influencing innovative schools in Indonesian rural areas. *Educational Administration: Theory and Practice*, 29(4), 269-284.
- Noor, S., Tajik, O., & Golzar, J. (2022). Simple random sampling. *International Journal of Education and Language Studies*, *I*(2), 78-82.
- Oganisjana, K., Shipsey, M., de Silva, C. T. G., & Pai, M. P. (2023). Factors that impact adaptability of companies to changing circumstances with minimal destructive effect during crises. *Journal of Systemics, Cybernetics and Informatics*, 21(2), 30-38. https://doi.org/10.54808/JSCI.21.02.30

- Özdaşlı, K. (2006). Toplam kalite yönetimi ve yenilik ilişkisi: Bir örnek olay [Total quality management and innovation relationship: A case study]. *Academic Sight International Refereed Online Journal*, 10, 1-16.
- Park, S., & Park, S. (2019). Employee adaptive performance and its antecedents: Review and synthesis. *Human Resource Development Review*, 18(3), 294-324. https://doi.org/10.1177/1534484319836315
- Patanakul, P., & Pinto, J. K. (2014). Examining the roles of government policy on innovation. *The Journal of High Technology Management Research*, 25(2), 97-107. http://dx.doi.org/10.1016/j.hitech.2014.07.003
- Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4), 612-624. https://doi.org/10.1037//0021-9010.85.4.612
- Riveras-León, J. C., & Tomàs-Folch, M. (2020). The organizational culture of innovative schools: The role of the principal. *Journal of Educational Sciences*, 42(2), 21-37. https://doi.org/10.35923/JES.2020.2.02
- Schulz, L. (2010). *Sneek peek in the black box: How change resources are related to positive organizational outcomes*. [Master's thesis, Universiteit Utrecht]. https://studenttheses.uu.nl/bitstream/handle/20.500.12932/6254/Schulz%20341426 4%20.pdf?sequence=1
- Shoss, M. K., Witt, L. A., & Vera, D. (2012). When does adaptive performance lead to higher task performance?. *Journal of Organizational Behavior*, *33*(7), 910-924. https://doi.org/10.1002/job.780
- Sinval, J., Miller, V., & Marôco, J. (2021). Openness toward organizational change scale (OTOCS): Validity evidence from Brazil and Portugal. *PLoS ONE*, *16*(4), e0249986. https://doi.org/10.1371/journal.pone.0249986
- Smith, P. A., & Hoy, W. K. (2007). Faculty change orientation scale. Unpublished manuscript.
- Stonar, J., & Wankel, C. (1986). Management. Prestige Hall Pres.
- Töremen, F. (2002). The obstacles and reasons of the change in educational organizations. Firat University Journal of Social science, 12(1), 185-202.
- Tümkaya, S., & Hürriyetoğlu, N. (2021). Öğretmenlerin mesleki bağlılık ve iş performansları arasındaki ilişkinin incelenmesi [Examining the relationship between teachers' professional commitment and job performance]. Ş. Koca ve M. Ş. Akgül (Eds.), Eğitim bilimlerinde araştırma ve değerlendirmeler-I [Research and evaluations in educational sciences-I] (pp. 267-284). Gece Library.
- Tunçer, P. (2012). Human resources and performance management in the change management process. *Journal of Social Sciences Research*, 7(1), 131-156.
- Tunçer, P. (2013). Change resistance in the process of change management. *Ondokuz Mayıs University Journal of Education Faculty*, 32(1), 352-385.
- Turan, S., & Cansoy, R. (2021). Yenilikçi okullar, özellikler-beceriler- stratejileruygulama örnekleri [Innovative schools, features-skills-strategies-application examples]. Nobel Publication.

- Vaughn, M., Parsons, S. A., Burrowbridge, S. C., Weesner, J., & Taylor, L. (2016). In their own words: Teachers' reflections on adaptability. *Theory Into Practice*, 55, 259-266. https://doi.org/10.1080/00405841.2016.1173993
- Visser, B. A. T. (2012). Adapting to change: Relationships between personal resources, job resources, attitudes towards change, and positive outcomes in times of considerable organisational change. [Master's thesis, Universiteit Utrecht]. https://studenttheses.uu.nl/bitstream/handle/20.500.12932/12233/Visser,%20B.%20 0113972.pdf?sequence=1
- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132-142.
- Williamson, B., & Payton, S. (2009). Curriculum and teaching innovation. Transforming clasroom practice and personalizsation. A Futurelab Handbook
- Yeşil, A. (2018). An empirical evaluation of change and change management on foundations. *International Academic Management Sciences Journal*, 4(5), 307-323.
- Yue, C. A., Men, L. R., & Ferguson, M. A. (2019). Bridging transformational leadership, transparent communication, and employee openness to change: The mediating role of trust. *Public Relations Review*, 45(3), 101779. https://doi.org/10.1016/j.pubrev.2019.04.012
- Yüner, B., & Özdemir, M. (2020). Examination of the relationship between school innovation and teacher creativity. *Pamukkale University Journal of Education*, *50*, 162-179. https://doi.org/10.9779/pauefd.538207
- Zacharo, K., Koutsoukos, M., & Panta, D. (2018). Connection of teachers' organizational commitment and transformational leadership. A case study from Greece, 17(8), 89-106. https://doi.org/10.26803/ijlter.17.8.6
- Zainal, M. A., & Matore, M. E. E. M. (2019). Factors influencing teachers' innovative behaviour: A systematic review. *Creative Education*, 10, 2869-2886. https://doi.org/10.4236/ce.2019.1012213

