International Journal of Educational Studies and Policy (IJESP)

Volume: 5, Issue: 1, May 2024

Relationship Between Resilience and Transformational Leadership According to the Perception of Academics*

Zehra İlbars¹, Gökhan Arastaman²

ABSTRACT

The aim of this study was to determine the views of academics related to transformational leadership and resilience attitudes in terms of various variables and the relationship between transformational leadership and resilience in higher education setting. This quantitative correlational study was carried out with 390 academics in the state universities in Ankara. Data of the study was collected with the "Resiliency Scale" which was developed by the researcher and the "Multifactor Leadership Questionnaire" developed by Bass and Avolio. Descriptive statistics and regression analysis were utilized. According to the results the resilience and leadership perceptions of the participants do not show a significant difference according to their academic positions and that the positivity and empathy dimensions of resilience are predictors of leadership. The findings that are expected to contribute to the literature were discussed, and based on the results of the research, suggestions were made to strengthen the resilience perceptions of the faculty members and to develop their leadership skills.

Keywords: Transformational leadership, resilience, higher education

DOI: https://doi.org/10.5281/zenodo.11198326

Article Info:

Received: 08.07.2023 Accepted: 12.05.2024 Article Type: Research Article

Cite as: İlbars. Z. & Arastaman, G. (2024). Relationship Between Resilience and Transformational Leadership According to the Perception of Academics. *International Journal of Educational Studies and Policy*, 5(1), 38-53.

^{*}This study was prepared from the first author's doctoral thesis, completed under the supervision of the second author.



¹ Dr. Zehra İlbars, Ministry of National Education, <u>zebars@hotmail.com</u>, DORCID: 0000-0003-4176-9943

Introduction

Universities today operate in an ever-changing environment (Cohen & Kisker, 2010). Advances in technology, changes in student demographics and educational policy, and increased accountability expectations are just some of the factors that require the higher education field to respond like never before (Del Favero, 2005; Lucas, 2000), and these factors have created a challenging operating environment for higher education administrators for many years. In order to overcome these challenges, it is important for academics to operate effectively and have the necessary skills to succeed despite the adversities. In this respect, it is important to understand whether transformational leadership can help academics cope with these challenges and maintain their resilience.

As change continues in higher education, it is important that faculty members have the necessary knowledge and skills, are equipped with leadership behaviors, and are effective in implementing and sustaining positive changes so that other members of the organization have the same behaviors. Leadership and resilience are two general frameworks that can benefit academics in fulfilling their responsibilities (Jones, Lefoe, Harvey & Ryland, 2002; Trowler, 1998). A great deal of research has been conducted on transformational leadership and resilience, but there is no strong empirical evidence for the importance of these two conceptual frameworks in higher education leadership. Therefore, it is assumed that this study will add knowledge to the academic research and literature on transformational leadership and resilience in higher education leadership.

From a leadership perspective, resilience theory emphasizes the leader's ability not only to follow a particular model but also flexibility and adaptability (Ledesma, 2014). A leader must be able to adapt his strategies and approach to changing conditions. Thus, the leadership process is affected not only by the internal characteristics of the leader but also by the variables in the leader's environment. This theory emphasizes the need for leaders to constantly adapt to changing conditions and show flexibility, instead of predictability and a fixed model in leadership (Ledesma, 2014; Smith, 2017). In this context, it is revealed that leaders must have a wide range of skills and abilities to respond rapidly and effectively to changing situations.

Examining the relationship between transformational leadership and academic resilience in higher education is an area of increasing interest in empirical research (Chen, Xie, Liu, 2021; Shelton, Hein, Phipps, 2022; Wang, Li, Li, 2017). The rationale for this interest is that the higher education environment is becoming increasingly complex and demanding, requiring academics to be resilient in the face of challenges and change. On the other hand, transformational leadership is argued to be effective in promoting organizational change, creating a positive organizational culture, and enhancing employee well-being and job satisfaction (Chen et al., 2021). In general, empirical studies indicate that there is a strong relationship between resilience and transformational leadership in higher education (Trowler, 1998; Jones, Lefoe, Harvey & Ryland, 2002). Although there are studies that address both transformational leadership and resilience individually in higher education, there is evidence that these two concepts should be addressed together (Valero, Jung, Andrew, 2015).

First, transformational leadership is known to positively affect academic performance by providing motivation, inspiration, and guidance to academics. By examining the relationship between transformational leadership and academic resilience, institutions can identify factors

that contribute to academic resilience and develop interventions to improve academic performance (Shelton et al., 2022).

Second, academics face various challenges and stressors, such as workload, time constraints, and job insecurity, which can negatively affect their academic resilience. By examining the relationship between transformational leadership and academic resilience, universities can identify leadership practices that can help academics overcome these challenges, and build their resilience (Chen et al., 2021).

Another important rationale is that academic resilience is critical for job satisfaction. When academics feel supported and valued by their leaders, they are more likely to stay in their positions and have higher levels of job satisfaction (Shelton et al., 2022). By examining the relationship between transformational leadership and academic resilience, universities can develop strategies to retain talented academics and foster a positive work culture (Wang, et al., 2017).

Considering all these factors, examining the relationship between transformational leadership and academic resilience is important to support academic achievement, address challenges and stressors, enhance organizational effectiveness, and promote job satisfaction and retention. Transformational leaders can foster academic resilience by creating a positive work environment that nurtures job satisfaction, organizational commitment, and job engagement. Therefore, investing in transformational leadership development in higher education institutions can be an effective strategy to increase academic resilience and ultimately improve organizational outcomes (Reivich & Shatte, 2002; Scott, 2002).

Literature Review

Resilience

The concept of resilience is derived from the Latin root "resiliens" (resilient) and means that a substance is flexible and can easily return to its original state (Greene, 2002). According to Masten, Best, and Garmezy (1990), resilience means adapting to challenging conditions and situations where goal achievement is threatened and achieving success through this adaptation. According to Henderson and Milstein (1996), resilience is defined as the process of self-correction and improvement or the capacity to recover, withstand adversity, and improve oneself. According to Grotberg (2003), resilience means the ability to cope with the difficulties encountered in life when faced with these difficulties, as well as the competence that enables people to emerge from these difficulties even stronger.

Academic Resilience

Academic resilience refers to the capacity of academics to withstand and adapt to the challenges and pressures inherent in their profession (Regehr, Nelson, Hildyard, 2017). It encompasses their ability to recover from adversity, maintain their well-being, and continue to make positive contributions to their institutions and the academic world (Dohaney et al., 2020). Resilience is a psychological construct that refers to an individual's capacity to adapt to and overcome adversity, stress, or significant life challenges. In the context of academics, resilience includes the ability to cope with the demands of the academic profession, such as teaching, research, administrative responsibilities, and work-life balance (Mackey, Gilmore, Dabner, Breeze, Buckley, 2012).

Transformational Leadership

Transformational leadership provides leaders with the ability to create an environment or social setting that changes leader-employee interactions, attitudes, and behaviors in ways that increase performance and commitment to the organization's vision and goals, and positively impacts individual and organizational outcomes (Bass & Avolio, 1990; Northouse, 2016). Specifically, transformational leadership has a positive influence on employee satisfaction, engagement, and performance and organizational outcomes related to culture, performance, change, and organizational innovation (Bass & Avolio, 1990; Northouse, 2016).

Transformational leadership is a leadership style characterized by leaders who inspire and motivate followers to go beyond their interests. Transformational leadership is explained by four main dimensions. These are inspirational motivation, idealized influence, individualized attention, and intellectual stimulation (Avolio et al., 2009; Avolio et al., 2014).

Transformational Leadership in Higher Education

Transformational leadership is considered an appropriate leadership approach to guide change in higher education institutions (Northouse, 2016; Voon, Lo, Ngui, Ayob, 2011). Transformational leaders in higher education are those who promote a shared vision, innovation, and personal and professional development among faculty and staff (Berson, Waldman, Pearce, 2016). Therefore, they are expected to be leaders who foster a culture of continuous improvement and promote a shared vision for the future of the institution. As the university environment is highly unstructured, flexible, and autonomous, employees prefer to have leaders who provide them with a clear mission and vision and instill confidence in them to do their jobs. For example, academic staff, who often work in solitary environments, need clear direction and vision from their leaders to be able to carry out their work based on clear vision and direction from senior management (Voon et al., 2011).

It is stated that transformational leadership can positively affect organizational culture and performance in Turkish universities (Kondakçı & Zayim-Kurtay, 2019). Leaders who inspire and motivate academic staff and encourage a culture of collaboration and innovation contribute to the development of universities (Çetin & Kınık, 2025; Yüner, 2020). However, it can be asserted that the implementation of transformational leadership in Turkish higher education faces difficulties such as bureaucratic structure, hierarchical traditions, and political influences, and is affected by various contextual factors. For example, centralized decision-making processes and legal regulations restrict the autonomy and innovative practices of university leaders (Kondakçı & Zayim-Kurtay, 2019). Transformational leadership of administrators in Turkish higher education institutions has the potential to positively impact the resilience of academic staff by empowering them and supporting them in their professional efforts (Gözükara & Şimşek, 2015; Yüner, 2020). Therefore, further research on this topic may reveal the specific mechanisms through which this relationship operates and identify strategies for developing resilience among academic staff in the Turkish context.

Exploring the relationship between transformational leadership and academics' resilience can provide insights into strategies through which academic leaders can increase their leadership effectiveness and promote resilience among their colleagues. In this study, which investigated the relationship between transformational leadership and resilience according to the views of faculty members, the following questions were sought to be answered;

- 1. Do faculty members' perceptions of resilience differ according to their academic positions?
- 2. Do faculty members' perceptions of leadership differ according to their academic positions?
- 3. Are faculty members' perceptions of resilience a significant predictor of their leadership behaviors?

Method

Research Design

This study, which examines the relationship between resilience and leadership according to the opinions of faculty members working at the Faculties of Science, Literature, Education, Economics, Administrative Sciences, and Engineering of four state universities in Ankara in the 2018-2019 academic year, was conducted with quantitative correlational research method. This study was designed in the correlational research model because it examines the relationship between two quantitative variable groups (Fraenkel et al., 2012). Correlational research provides insight into the relationship between two or more variables or conditions and the strength and direction of the relationship (Ary et al., 2006).

Population and Sample

The population of the study consists of faculty members working in state universities in Ankara, which were established before 2000. There are 2441 faculty members in the common faculties of these universities. A stratified sampling method was adopted in sample selection. The aim is to divide the population into different sub-strata before selecting the sample and then select the samples from these strata (Onwuegbuzie & Collins, 2007). It is presented in Table 1.

Table 1. Descriptive statistics of sample

Universities	Number of academics	Percent (%)	Sample	Percent (%)
Ankara University	446	18.27	71	18.20
Gazi University	741	30.36	115	29.48
Hacettepe University	653	26.75	158	40.5
METU	601	24.62	46	11.80
Total	2441	100	390	100

As seen in Table 1, it was calculated that there should be a total of 390 participants in the study, including 71 faculty members at Ankara University, 115 faculty members at Gazi University, 158 faculty members at Hacettepe University, and 46 faculty members at METU. Due to the problems that may arise in the return of the data collection tool, the data collection tools were distributed to 500 faculty members in the implementation phase.

Data Collection Tools

Resilience Scale

In the study, the "Resilience Scale" developed by the researcher was used to measure the resilience perceptions of faculty members. This scale consists of seven dimensions and 34 items. The reliability of the scale and its seven subscales was examined with Cronbach alpha, and the Cronbach alpha coefficient for the entire scale was calculated as 0.89. Cronbach's alpha values for the sub-dimensions of the scale are .83 for "Self-Confidence-Personal Efficacy", respectively; .72 for "Positivity-Empathy"; .77 for "Proactivity"; .64 for "Interpersonal Interaction"; .60 for "acceptance"; .61 for "Internal Discipline"; .72 for "improvement". According to these results, based on the data set collected from 390 participants, it was concluded that the Self-Confidence-Personal Efficacy, Positivity-Empathy, and Proactivity subscales of the Resilience scale and the entire scale were highly reliable.

The appropriateness of the model created for the seven-factor structure of the resilience scale was first evaluated by the ratio of the chi-square value to the degrees of freedom. Accordingly, the ratio of the chi-square value to degrees of freedom should be less than 5 (Kline, 2005). It is stated that acceptable fit values for AGFI, GFI, NFI, CFI, IFI are .90 and above for goodness of fit indices, and 0.08 and below for RMR and RMSEA (Byrne & Campbell, 1999). In this study, according to the results of confirmatory factor analysis, the fit indices of the measurement tool were found to be at the desired level (x2/sd = 3.82, RMSEA= .05, NFI= 0.88, CFI=0.91, GFI= 0.83). When the goodness-of-fit results obtained in the current study are evaluated as a whole, it is concluded that the seven-dimensional factor structure of the Resilience scale is also valid in the current study.

Multifactor leadership scale (MLQ)

In the study, the Multifactor Leadership Scale developed by Bass and Avolio (1990) and used in many studies was utilized to determine the leadership perceptions of higher education administrators. The scale has been utilized in many studies and the version adapted into Turkish by Mehmet Korkmaz under the name of "Leadership Inventory" was used in this study. As a result of the factor analysis conducted for the leadership inventory adapted into Turkish by Korkmaz (2005), a two-factor structure emerged. The factor loadings of the sub-dimensions of transformational leadership ranged from .56 to .88. The factor loadings for interactional leadership ranged from .52 to .77. The leadership scale consists of eight subscales. Cronbach's alpha coefficients were calculated to test the reliability of each subscale. Accordingly, the alpha value of the "Contingent Rewarding" subscale of the leadership scale is .86; the alpha value of the "Inspirational Motivation" subscale is .88; the alpha value of the "Idealized Influence" subscale is .89; the alpha value of the "Intellectual Stimulation" subscale is .87; the alpha value of the "Individual Consideration" subscale is .84; the alpha value of the "Management by Exception (Active)" subscale is .72 and the alpha value of the "Management by Exception (Passive)" subscale is .62; the alpha value of the "Laissez-faire" subscale is .61; and the alpha value of the whole scale is .93. As a result of confirmatory factor analysis, the fit indices were found to be at an acceptable level (x2 /sd = 3.45, RMSEA= .08, NFI= 0.96, CFI=0.97, GFI= 0.76).

Data Collection Process

While the data collection tool was sent to the faculty members via e-mail, it was also personally applied by visiting them for face-to-face interviews. For faculty members who had time problems or were absent from their offices, the scales were left at the department secretariat and collected by revisiting after a certain period of time. Participants took part in the study voluntarily.

Data Analysis

In order to calculate the scores of the answers given by the participants in the data analysis, the items in the scales were given 5 points for "always", 4 points for "mostly", 3 points for "sometimes", 2 points for "rarely" and 1 point for "never". The responses to each item in the scale ranged from 5.00 to 1.00 from positive to negative in accordance with these grades. Based on the assumption that the intervals in the data collection tools are equal (4/5), lower and upper limits for the options were determined. The data obtained as a result of the research were first analyzed in terms of normality tests.

Ethics

All ethical rules were followed during the collection and analysis of the research data. Ethical approval for the research was obtained by the decision of the Hacettepe University Educational Sciences Ethics Committee dated 03.02.2021 and numbered 1431179. It was stated that the data obtained from the research will be used only for scientific purposes and will not be shared with third parties.

Findings

In this section, the research findings obtained as a result of the analyses carried out to solve the sub-problems are presented.

Do faculty members' perceptions of resilience differ according to their academic positions?

One-way analysis of variance (ANOVA) was conducted to examine whether faculty members' perceptions of resilience differ according to their academic positions. The results are presented in Table 2.

Table 2. ANOVA results on participants' perceptions of resilience according to academic position

Dimensions	Academic Position	N	Mean	Sd.	df.	F	P
	Lecturer	341	4.04	.47		1.94	
1. Self-Confidence-Personal	Head of department	29	4.18	.40	3-386		12
Competence	Vice-dean	9	4.00	.41	3-300		.12
	Dean	11	4.29	.42			
	Lecturer	341 4.04 .4		.41			
2. Positivity-Empathy	Head of department	29	4.11	.33	3-386	1.62	16
	Vice-dean 9 3.93 .41				3-300	1.02	.16
	Dean 11 4.28			.41			
	Lecturer	341	4.10	.51			
2. Duna attinitae	Head of department	29	4.25	.38	2 200	1.00	20
3. Proactivity	Vice-dean	9	4.13	.38	3-386		.38
	Dean	11	4.11	.65			
	Lecturer	341	3.95	.56			
4. Interpersonal Interaction	Head of department	29	4.05	.45	3-386	.46	.70
_	Vice-dean	9	4.02	.44			

	Dean	11	4.09	.55				
	Lecturer	341	3.98	.48				
5 Agantanaa	Head of department	29	4.06	.36	3-386	1.64	.17	
5.Acceptance	Vice-dean	9	3.66	.68	3-360		.1/	
	Dean	11	3.90	.63				
	Lecturer	341	2.87	.58		3.36		
6 Internal discipline	Head of department	29	2.94	.52	3-386		.01*	
6. Internal discipline	Vice-dean	2.77	.40	3-360	3.30	.01		
	Dean	11 3.42 .55						
	Lecturer	341	4.02	.57		1.65		
7. Development	Head of department	29	4.21	.45	3-386		.17	
7. Development	Vice-dean	9	3.88	.47	3-360		.1/	
	Dean	11	4.21	.56				
	Lecturer	341	3.93	.35				
Total	Head of department	29	4.04	.29	3-386	2.17	.09	
Total	Vice-dean		3.85	.33	3-360	2.17	.09	
	Dean	11	4.13	.41				

^{*}p < .05

As shown in Table 2, the participants' perceptions of resilience in terms of Internal Discipline demonstrate statistically significant difference according to their academic positions $[F_{3-386} = 3.36, p < .05]$. Tukey, one of the multiple comparison tests, was used to determine which academic position groups were different. When the mean Internal Discipline scores of the participants were examined, it was observed that the internal discipline of the Deans ($\bar{X} = 3.42$) was higher than the Internal Discipline of the faculty members ($\bar{X} = 2.87$). Participants' views on Positivity-Empathy, Proactivity, Self-Confidence-Personal Competence, Interaction, Acceptance and Development subscales do not show a statistically significant difference according to their academic positions [F₃₋₃₈₆ Self-Confidence-Personal Competence = 1. 94, p> .05; F_{3-386} Positivity-Empathy = 1.62, p> .05; F_{3-386} Proactivity = 1.00, p> .05; F_{3-386} Interpersonal Interaction = .46, p> .05; F₃₋₃₈₆ Acceptance = 1.64, p> .05; F₃₋₃₈₆ Development = 1.65, p> .05]. Similarly, the participants' views on the Resilience scale do not indicate a statistically significant difference according to their academic positions [F₃₋₃₈₆ Total Scale = 2.17]. According to this result, deans, vice deans, department heads and faculty members have similar views on the Self-Confidence-Personal Competence, Positivity-Empathy, Proactivity, Interpersonal Interaction, Acceptance, and Development dimensions of resilience perceptions.

Do faculty members' perceptions of leadership differ according to their academic positions?

One-way analysis of variance (ANOVA) was conducted to examine whether faculty members' perceptions of leadership differ according to their academic positions. The results are presented in Table 3.

Table 3. ANOVA results regarding participants' leadership perceptions according to academic position

	Academic position	N	Ort.	Ss.	Sd.	F	P
1. Contingent Revard	Lecturer	341	3.32	.99			
1. Contingent Revard	Head of department	29	3.56	.88	3 386	2.37	.07
	Vice-dean	9	3.69	1.02	3-360		.07
	Dean	11	3.97	.84			
	Lecturer	341	3.44	.98		2.75	
2.Inspirational	Head of department	29	3.76	.76	3 386		.04*
Motivation	Vice-dean	9	3.97	.81	3-360		.04
	Dean	11	4.00	.93			
	Lecturer	341	3.37	.89			
2 [4-5];4 [Head of department	29	3.53	.79	2 296	1.04	.12
Motivation 3.Idealized Influence 4.Intellectual Stimulation 5.Individualized Consideration 6.Management-by- Exception (Active)	Vice-dean	9	3.70	.71	3-380	1.94	.12
	Dean	11	3.92	.93			
	Lecturer	341	3.18	.97			
4.Intellectual	Head of department	29	3.49	.80	2.296		10
Stimulation	Vice-dean	9	3.55	.95	3-386		.18
	Dean	11	3.50	.93			
7 T 1' ' 1 1' 1	т.,	241	2.00	1.05		1.68	
	Lecturer			.93			
	Head of department			.98	3-386		.16
Consideration	Vice-dean			1.00			
5.Individualized Consideration	Dean	11	3.27				
	Lecturer	341	2.94	.79			
6.Management-by-	Head of department	29	3.18	.68	2 296	1.14	.33
Exception (Active)	Vice-dean	9	2.88	.71	3-360		.33
• • •	Dean	apartment 341 3.32 .99 29 3.56 .88 3-386 2.37 9 3.69 1.02 3-386 2.37 11 3.97 .84 3-386 2.75 29 3.76 .76 3-386 2.75 9 3.97 .81 3-386 2.75 11 4.00 .93 3-386 1.94 29 3.53 .79 3-386 1.94 29 3.41 3.92 .93 3-386 1.94 341 3.18 .97 .99 3.55 .95 3-386 1.61 29 3.41 3.98 3-386 1.61 .98 3-386 1.68 29 3.41 2.98 .93 3-386 1.68 .99 .98 3-386 1.68 .98 .3-386 1.68 .98 .3-386 1.68 .98 .93 .3-386 1.68 .98 .3-386 1.68 .98 .3-386 1.68 .98 .3-386 1.68 .98 .3-					
	Lecturer	341	3.24	.62			
7.Management-by-	Head of department	29	3.32	.63	2.296	22	0.1
Exception (Passive)	Vice-dean	9	3.36	.53	3-386	.32	.81
, , ,	Dean	11	3.15	.67			
	Lecturer	341	2.94	.37			
0 I -: f-:	Head of department	29	2.96	.35	2.296	26	0.4
8.Laissez-faire	Vice-dean	9	2.86	.25	3-386	.26	.84
	Dean	11	2.88	.39			
	Lecturer	341	3.20				
m . 1	Head of department		2.42	.59	2.206	2.27	0.0
Total	Vice-dean	9	2.41		3-386	2.27	.08
	Dean	11	3.53				

^{*}p < .05

As can be seen in Table 3, the participants' views on the participants' perceptions of leadership in terms of Inspirational Motivation show a statistically significant difference according to their academic positions [$F_{3-386} = 2.75$, p< .05]. Tukey, one of the multiple comparison tests, was used to determine which academic position groups were different. When the mean scores of the participants' Inspirational Motivation were examined, it was observed that the Inspirational Motivation of Deans ($\bar{X} = 4.00$) was higher than the Inspirational Motivation of department heads ($\bar{X} = 3.76$). Participants' views on Contingent Reward, Idealized Influence, Intellectual Stimulation, Individual Consideration, Management by Exception (Active), Management by Exception (Passive), and Laissez-faire subscales do not show a statistically significant difference according to their academic positions [F_{3-386} Contingent Rewarding = 2. 37,

p> .05; F₃₋₃₈₆ Idealized Influence = 1.94, p> .05; F₃₋₃₈₆ Intellectual Stimulation = 1.61, p> .05; F₃₋₃₈₆ Individual Consideration = 1.68, p> .05; F₃₋₃₈₆ Management by Exception (Active) = 1.14, p> .05; F₃₋₃₈₆ Management by Exception (Passive); = .32, F₃₋₃₈₆ Laissez-faire = .26, p> .05]. Similarly, the participants' views on the Leadership scale do not show a statistically significant difference according to their academic positions [F₃₋₃₈₆ Total Scale = 2.27]. According to this result, the dean, vice dean, department head and faculty members' have similar views on the perceptions of resilience on Contingent Rewarding, Idealized Influence, Intellectual Stimulation, Individual Consideration, Management by Exception (Active), Management by Exception (Passive) and Laissez-faire.

Are faculty members' perceptions of resilience a significant predictor of their leadership behaviors?

Pearson correlation coefficient values between the research variables were calculated before proceeding to the regression analysis of faculty members' perceptions of Resilience (Self-Confidence-Personal Competence, Positivity-Empathy, Proactivity, Interpersonal Interaction, Acceptance, Internal Discipline, and Development) as predictors of their Leadership behaviors. The results are presented in Table 4.

Table 4. Correlations among variables

Variable	R	R1	R2	R3	R4	R5	R6	R7	L	L1	L2	L3	L4	L5	L6	L7	L8
Resilience																	
R1.Self-Confidence-Personal	.85*																
Competence																	
R2. Positivity- Empathy	.79*	.53*															
R3. Proactivity	.74*	.57*	.51*														
R4. Interpersonal Interaction	.73*	.57*	.54*	.47*													
R5.Acceptance	.63*	.45*	.49*	.39*	.33*												
R6. Internal Discipline	.36*	.25*	.18*	.20*	.11*	.06*											
R7. Development	.74*	.59*	.57*	.42*	.56*	.44*	.17*										
Leadership	.22*	.14*	.25*	.18*	.19*	.13*	03*	.17*									
L1. Contingent Revard	.20*	.14*	.22*	.16*	.16*	.13*	02*	.15*	.93*								
L2. Inspirational Motivation	.18*	.12*	.22*	.15*	.18*	.12*	07*	.14*	.90*	.86*							
L3. Idealized Influence	.18*	.09*	.23*	.15*	.17*	.11*	03*	.16*	.95*	.88*	.89*						
L4. Intellectual Stimulation	.21*	.14*	.23*	.17*	.19*	.15*	04*	.17*	.92*	.88*	.85*	.87*					
L5. Individualized Consideration	.23*	.16*	.24*	.19*	.20*	.13*	.02*	.17*	.90*	.85*	.78*	.84*	.86*				
L6.Management-by-Exception	.07*	.09*	.06*	.10*	.04*	.03*	06*	.04*	.09*	05*	09*	03*	04*	02*			
(Active)																	
L7.Management-by-Exception	.07*	.05*	.08*	.13*	.06*	.05*	.04*	00*	.21*	.11*	.08*	.09*	.10*	.14*	.06*		
(Passive)																	
L8.Laissez-faire	08*	10*	06*	02*	04*	08*	04*	05*	.18*	.17*	.14*	.14*	.16*	.12*	03*	24*	

As can be seen in Table 4, all Pearson correlation coefficient values between the research variables are statistically significant. There is a low level and positive relationship between the participants' perception of resilience and transformational leadership behavior (r = .22, p < .001). However, when the participants' responses to the sub-dimensions of their perceptions of Resilience are evaluated in general, it is seen that there are significant, positive, and moderate relationships between each sub-dimension. Similarly, when the participants' responses to the sub-dimensions of Leadership behavior are evaluated in general, it is observed that there are significant, positive and high-level relationships between each sub-dimension and low-level negative relationships.

Multiple regression analysis was used to determine the extent to which faculty members' perceptions of resilience (Self-Confidence-Personal Competence, Positivity-Empathy, Proactivity, Interpersonal Interaction, Acceptance, Internal Discipline and Development) explain the variance in their understanding of leadership. The results of the multiple regression analysis are presented in Table 5.

Table 5. Multiple Regression Analysis Results for Predicting Leadership Behaviour

Variable	В	Standart Error _B	β	t	P
Constant	1.681	.354		4.753	.000
1.Self-Confidence–Personal Competence	038	.097	028	391	.690
2. Positivity-Empathy	.297	.105	.196	2.835	.005*
3. Proactivity	.107	.079	.086	1.352	.177
4. Interpersonal Interaction	.073	.075	.065	.980	.328
5. Acceptance	002	.076	001	023	.982
6. Internal Discipline	103	.055	096	-1.871	.062
7. Development	.019	.076	.017	.251	.802
$R = .284$ $R^2 = .064$ $F_{(7-382)} = 4.79$ $p = .000$					

As can be seen in Table 5, faculty members' perceptions of resilience are a significant predictor of leadership behaviours (R = 284, p < .01). All dimensions of resilience perception explain approximately 6% of leadership understanding ($R^2 = .064$; p < .01). According to the standardized regression coefficients (β), the order of importance of the predictor variables in explaining leadership understanding is as follows: Positivity-Empathy, Internal Discipline, Proactivity, Interpersonal Interaction, Self-Confidence-Personal Competence, Development and Acceptance. When the t-test results regarding the significance of the regression coefficients are examined, it is seen that the dimensions of Positivity-Empathy are statistically significant predictors of leadership understanding, while the sub-dimensions of Self-Confidence-Personal Competence, Proactivity, Interpersonal Interaction, Acceptance, Internal Discipline, and Development are not statistically significant predictors of leadership understanding.

Conclusion and Discussion

In this study, it was aimed to determine the perceptions of resilience of faculty members working in state universities established before 2000 in Ankara Province and to reveal its relationship with transformational leadership.

When it was examined whether faculty members' perceptions of resilience varied according to their academic positions, it was observed that while faculty members' perceptions of resilience regarding Internal Discipline showed a statistically significant difference according to their academic positions, when the mean scores of Internal Discipline were considered, it was observed that Deans had higher internal discipline than faculty members. It is possible to explain this difference in terms of leadership experience, trainings received depending on the position, the pressure created by exhibiting a good managerial performance, and the enthusiasm and excitement brought by the task (Low, 2010). Considering the environment of constant change in higher education, the resilience and flexibility of higher education leaders are important for them to fulfill their duties effectively in the face of change (Montez, Wolverton, Gmelch, 2003; Bright & Richards, 2001; Lucas, 2000).

The participants' views on both the Self-Confidence-Personal Competence, Positivity-Empathy, Proactivity, Interpersonal Interaction, Acceptance, and Development subscales and their perceptions of resilience did not show a statistically significant difference according to their academic positions. According to this result, it was revealed that deans, vice deans, department heads, and faculty members had similar views on the Self-Confidence-Personal Competence, Positivity-Empathy, Proactivity, Interpersonal Interaction, Acceptance, and Development dimensions of resilience perceptions.

In the study conducted by Budak and Sürgevil (2005) on university faculty members, it was determined that the group with the least burnout in each dimension was associate professors and professors, and it was revealed that research assistants, lecturers, assistant professors, and doctoral lecturers had more burnout. Therefore, this result reveals that burnout may be a risk factor affecting resilience.

Addedly the views of faculty members on the leadership scale did not show a statistically significant difference according to their academic positions; the dean, vice dean, department head and faculty members had similar views on the leadership perceptions of Contingent Rewarding, Idealized Influence, Mental Influence, Individual Support, Management by Exception (Active), Management by Exception (Passive) and Freeing Leadership dimensions.

Berg and Jarbur (2014) argue that expectations for leaders are increasing across society and that in academic circles, students and employees expect more active forms of leadership such as coaching and mentoring within their institutions. They emphasize that this situation requires a different level of leadership that is less hierarchical and more team-oriented than traditional leadership and that the academic leader should be competent in his/her field of expertise and be a role model as one of the challenges faced by academic leaders. Therefore, this research finding can be considered to be appropriate for a less hierarchical and more team-oriented leadership level.

It was found that there is a low level and positive relationship between faculty members' perception of resilience and leadership behaviors, however, when the participants' responses to the sub-dimensions of their perception of resilience are evaluated in general, it is concluded that there are significant, positive and moderate relationships between each sub-dimension. Similarly,

when the responses of the faculty members to the sub-dimensions of leadership behaviors were evaluated in general, it was concluded that there were significant, positive, and high-level relationships between each sub-dimension and low-level relationships with negative direction.

In the study, it was concluded that faculty members' perceptions of resilience were a significant predictor of their perceptions of leadership. Considering that resilience is a characteristic of transformational leadership, it can be said that this result is expected. Research on the relationship between leadership and resilience reveals that the leader's leadership style affects employee or organizational resilience (Bono & Judge, 2004; Conner, 1993). For example, Nguyen, Kuntz, Naswall & Malinen (2016) found that the leader's empowering leadership style and behaviors including proactive personality and optimism have a significant relationship with employees' resilience behaviors. On the other hand, the finding is in line with the idea that resilience prepares individuals for higher levels of achievement (Bono & Judge, 2004; Conner, 1993). Therefore, it can be confirmed that resilience is a key element of leadership.

Similar to this finding, Wasden (2014) revealed that there is a relationship between leadership and resilience in his study. In a similar study, Wescott (2018) found a statistically positive relationship between transformational leadership behaviors and resilience in his study titled "the role of resilience in transformational leadership of managers". In Offutt's (2011) study, no relationship was found between the dimensions of resilience and leadership.

Suggestions and Limitations

Examining the relationship between transformational leadership and academics' resilience may lead to the development of strategies and interventions that will contribute to increasing the resilience of academics, leading to increased academic performance, job satisfaction, and well-being. Since faculty members with lower seniority in their positions have lower levels of resilience than others, measures can be taken by university senior administrations to establish an academic culture based on collegial solidarity and cooperation in order to increase the level of resilience of these faculty members. On the other hand, in this study, resilience was found to be a predictor of leadership. Based on this result, faculty members can be ensured to participate in leadership development programs that include social support programs within the university. Finally, considering the effect of protective factors in the context of leadership and employee resilience, social support systems can be put into action to establish colleague solidarity and trust-based relationships at the university.

In future studies, different models can be tried by taking into account contextual factors such as organizational culture or external stressors that may affect the relationship between resilience and transformational leadership. Additionally, since a cross-sectional design was used in the study, it can be said that relationships between resilience and transformational leadership can only be established at a certain point in time, which limits the ability to draw causal conclusions. Therefore, this limitation of the study can be eliminated with different methodological designs.

References

- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7th ed.). Belmont, CA: Thomson Wadsworth.
- Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. *The Leadership Quarterly*, 25, 105–131.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60(1), 421–449.
- Bass, B., & Avolio, B. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14(5), 21-27.
- Berg, C. H., & Jaber, C. (2014). Leadership and leadership development in academia. *CESAER Taskforce HR*.
- Berson Y, Waldman DA, Pearce CL (2016) Enhancing our understanding of vision in organisations: Toward an integration of leader and follower processes. *Organisational Psychology Review* 6(2): 171–191. Crossref. ISI.
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: a metaanalysis. *Journal of applied psychology*, 89(5), 901–910.
- Bright, D. F., & Richards, M. P. (2001). The academic deanship: Individual careers and
- Budak, G., & Sürgevil, O. (2005). Tükenmişlik ve tükenmişliği etkileyen örgütsel faktörlerin analizine ilişkin akademik personel üzerinde bir uygulama. *Dokuz Eylül Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, 20(2), 95-108.
- Byrne, B. M., & Campbell, T. L. (1999). Cross-cultural comparisons and the presumption of equivalent measurement and theoretical structure: A look beneath the surface. *Journal of Cross-Cultural Psychology*, 30(5), 555-574.
- Chen, R., Xie, Y., & Liu, Y. (2021). Defining, conceptualizing, and measuring organizational resilience: A multiple case study. Sustainability, 13(5), 2517.
- Cohen, A. M., & Kisker, C. B. (2010). *The Shaping of American Higher Education: Emergence and Growth of the Contemporary System.* San Francisco: Jossey-Bass Publishers.
- Conner, D. R. (1993). Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail. Newyork: Villard Books.
- Çetin, M. O., & Kınık, F. S. F. (2015). An analysis of academic leadership behavior from the perspective of transformational leadership. *Procedia-Social and Behavioral Sciences*, 207, 519-527.
- Del Favero, M. (2005). The social dimension of academic discipline as a discriminator of academic deans' administrative behaviors. *The Review of Higher Education*, 29(1), 69-96.
- Dohaney, J., de Róiste, M., Salmon, R. A., & Sutherland, K. (2020). Benefits, barriers, and incentives for improved resilience to disruption in university teaching. *International Journal of Disaster Risk Reduction*, 50, 1–9. https://doi.org/10.1016/j.ijdrr.2020.101691
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education*. (8th ed.). New York: McGraw-Hill.

- Gözükara, İ., & Şimşek, O. F. (2015). Linking transformational leadership to work engagement and the mediator effect of job autonomy: A study in a Turkish private non-profit university. *Procedia-Social and Behavioral Sciences*, 195, 963-971.
- Greene, R. R. (2002). Human behavior theory: A resilience orientation. R. R. Greene içinde, *An integrated approach to practice, policy, and research* (s. 1-28). Washington D.C.: NASW Press.
- Grotberg, H. (2003). What is Resilience? How Do you Promote It? How Do You Use It? H. Grotberg içinde, *Resilience for Today: Gaining Strength from Adversity* (s. 1-30). Westport, CT: Praeger Publishers.
- Henderson, N., & Milstein, M. (1996). Resiliency in Schools: Making It Happen for Students and Educators. Thousand Oaks, California: Corwin Press.İnstitutional roles. San Francisco: Jossey-Bass.
- Jones, S., Lefoe, G., Harvey, M., & Ryland, K. (2002). Distributed leadership: a collaborative framework for academics, executives and professionals in higher education. *Journal of Higher Education Policy and Management*, 34(1), 67-78.
- Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling*. New York: Taylor & Francis Ltd.
- Kondakci, Y., & Zayim-Kurtay, M. (2019). Cultural Transformation and Academic Leadership: The Context of Turkish Higher Education. In University Governance and Academic Leadership in the EU and China (pp. 144-163). IGI Global.
- Korkmaz, M. (2005). Duyguların ve liderlik stillerinin öğretmenlerin performansı üzerinde etkisi. *Kuram Ve Uygulamada Egitim Yönetimi Dergisi, 11*(3), 401-422.
- Ledesma, J. (2014). Conceptual Frameworks and Research Models on Resilience in Leadership. *Sage Open*, 4(3). https://doi.org/10.1177/2158244014545464
- Low, J. (2010). Resilience in academic administration: Leading higher education in times of change (Doctoral Dissertation). The Florida State University: Florida.
- Lucas, A. F. (2000). *Leading Academic Change: Essential Roles for Department Chairs*. San Fransisco: Jossey-Bass Publishing.
- Mackey, J., Gilmore, F., Dabner, N., Breeze, D., & Buckley, P. (2012). Blended learning for academic resilience in times of disaster or crisis. *MERLOT Journal of Online Learning and Teaching*, 8(2), 35–48.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(4), 425-444.
- Montez, J. M., Wolverton, M., & Gmelch, W. H. (2003). The roles and challenges of deans. *The Review of Higher Education*, 26(2), 241-266.
- Nguyen, Q., Kuntz, J. R. C., Naswall, K., & Malinen, S. (2016). Employee resilience and leadership styles: The moderating role of proactive personality and optimism. *New Zealand Journal of Psychology*, 45(2), 13-21.
- Northouse, P. G. (2016). Leadership: Theory and practice (7th ed.). Sage Publications

- Offutt, M. S. (2011). An Examination of the Characteristic, Resilience, and Leadership Practices in Public School Elementary Principals (Doctoral Dissertation). West Virginia University: West Virginia.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281-316.
- Regehr, C., Nelson, S., & Hildyard, A. (2017). Academic continuity planning in higher education. *Journal of Business Continuity & Emergency Planning*, 11(1), 73–84. https://pubmed.ncbi.nlm.nih.gov/28903814/
- Reivich, K., & Shatté, A. (2002). The resilience factor: 7 essential skills for overcoming life's inevitable obstacles. New York: Broadway Books.
- Scott, P. (2002). Küreselleşme ve üniversite: 21. yüzyılın önündeki meydan okumalar. *Kuram ve Uygulamada Eğitim Bilimler*, *2*(1), 191-208.
- Shelton, C. D., Hein, S. D., & Phipps, K. A. (2022). Positive and proactive leadership: disentangling the relationships between stress, resilience, leadership style and leader satisfaction/well-being. *International journal of organizational analysis*, 30(2), 408-429.
- Smith, C. L. (2017). Coaching for leadership resilience: An integrated approach. *International Coaching Psychology Review*, 12(1), 6-23.
- Trowler, P. (1998). Academics Responding to Change: New Higher Education Frameworks and Academic Cultures. Philadelphia: Open University Press.
- Valero, J. N., Jung, K., & Andrew, S. A. (2015). Does transformational leadership build resilient public and nonprofit organizations? *Disaster Prevention and Management*, 24(1), 4-20.
- Voon, M. L., Lo, M. C., Ngui, K. S., & Ayob, N. B. (2011). The influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia. *International Journal of Business, Management and Social Sciences*, 2(1), 24–32.
- Wang, Z., Li, C., & Li, X. (2017). Resilience, leadership and work engagement: The mediating role of positive affect. *Social Indicators Research*, 132, 699-708.
- Wasden, S. T. (2014). A Correlational Study on Transformational Leadership and Resilience in Higher Education Leadership. Idaho: University of Idaho.
- Wescott, P. (2018). The Role of Resilience among K-12 Principals and Administrators Leading Transformational Change (Doctoral dissertation, Seattle Pacific University).
- Yüner, B. (2020). Transformational Teaching in Higher Education: The Relationship between the Transformational Teaching of Academic Staff and Students' Self-Efficacy for Learning. *Educational Policy Analysis and Strategic Research*, 15(4), 350-366.