



Research Article

The Effect of Psychological Safety and Academic Burnout on Work Engagement: A Study on Public Universities in Türkiye

Psikolojik Güvenliğin ve Akademik Tükenmişliğin İşe Angaje Olma Üzerindeki Etkisi: Türkiye’de Kamu Üniversiteleri Üzerine Bir Araştırma

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ABSTRACT

This study aims to reveal the effects of psychological safety and academic burnout on the work engagement of academics working in public universities in Türkiye. The population of the research is the academic staff working in public universities in Türkiye. The sample is 424 academics who could be reached from these universities and academics and answered the questionnaire by convenience sampling method. SPSS 22.0 program was used for the analysis of the data obtained in the study. As a result of the research, it is seen that there is a low positive relationship between psychological safety and work engagement scores. It is understood that there is a low negative relationship between psychological safety and academic burnout. It was found that there was no significant relationship between academic burnout and work engagement variables. According to the regression analysis results, psychological safety is a significant predictor of being engaged in work. However, academic burnout is not a significant predictor of work engagement.

ÖZ

Bu araştırmanın amacı, Türkiye’de kamu üniversitelerde görev yapan akademisyenlerin psikolojik güvenliğin ve akademik tükenmişliğin işe angaje olma üzerine etkilerini ortaya koymaktır. Araştırmanın evreni, Türkiye’deki kamu üniversitesinde görev yapan öğretim elemanlarıdır. Örneklem, kolayda örnekleme yöntemi ile bu üniversite ve akademisyenlerden ulaşılabilmiş ve anketi yanıtlamış olan 424 akademisyendir. Araştırmada elde edilen verilerin analizleri için SPSS 22.0 programı kullanılmıştır. Araştırma neticesinde psikolojik güvenlik ile işe angaje olma puanları arasında düşük düzeyde pozitif bir ilişki olduğu görülmektedir. Psikolojik güvenlik ile akademik tükenmişlik arasında ise, düşük düzeyde negatif yönlü ilişki olduğu anlaşılmaktadır. Akademik tükenmişlik ile işe angaje olma değişkenleri arasında ise, anlamlı bir ilişki bulunmadığı tespit edilmiştir. Regresyon analizi sonucuna göre, psikolojik güvenlik işe angaje olmanın anlamlı bir yordayıcısıdır. Bununla birlikte akademik tükenmişlik ise, işe angaje olmanın anlamlı bir yordayıcısı değildir.

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1. INTRODUCTION

The study aims to reveal the effects of psychological safety and academic burnout of academics working in Türkiye on work engagement. Since there is no study in the academic literature in the context of Türkiye in which the effects of psychological safety and academic burnout on work engagement are measured at the same time, this situation is important as it creates an element of priority and originality to the study.

Since higher education has a primary role in developing the knowledge economy of the nation, the knowledge indicators of any country show the development of a society (Boggs, 2003; Pouris & Inglesi-Lotz, 2014; Tchamyou, 2017). The performance of employees in higher education institutions is of unique importance for a country's knowledge economy, which is still not given enough attention by actors for the survival of the quality and research of those institutions (Carayannis & Campbell, 2021). The performance of employees in higher education institutions has a crucial role in fuelling a country's knowledge economy. Quality education and research are essential components of a thriving knowledge economy. However, the attention given to this issue is not sufficient to ensure the sustainability of the quality and research outputs of these institutions, potentially affecting the long-term growth and competitiveness of a country's knowledge economy.

Psychological safety is a concept that significantly affects employees' work performance and productivity as well as ensuring healthier working conditions and job security (Newman, Donohue & Eva, 2017; Frazier, Fainshmidt, Klinger, Pezeshkan & Vracheva, 2017). Academic burnout is characterized by emotional exhaustion, cynicism, and a reduced sense of accomplishment (Lee et al. 2010; Lin & Huang, 2014). Psychological safety and academic burnout are two concepts that have significant effects on engagement at work, especially on work engagement. Psychological safety, defined as a shared belief that it is safe to take interpersonal risks within a group, has a positive effect on work engagement (Yaşar Uğurlu & Ayas, 2016; Dramanu, Milledzi & Asamani, 2020). On the other hand, academic burnout, which is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, has been shown to hurt work engagement (Pehlivanoğlu & Civelek, 2019; Kuok, 2022). Therefore, it is important to understand the interaction between these two concepts to promote a positive and productive working environment.

Academic burnout is a common problem in today's education system and can have serious consequences for academics (Grayson & Alvarez, 2008; Skaalvik & Skaalvik, 2009). Academic burnout can lead to feelings of exhaustion, cynicism, and decreased motivation and may cause academics to disengage from their jobs (Bakker, Demerouti & Verbeke, 2004; David, 2010). However, research has shown that psychological safety can help reduce the effects of burnout and encourage a greater commitment to work (Idris & Dollard, 2011; Mansour & Tremblay, 2019). Psychological safety creates an atmosphere where individuals feel comfortable taking risks and being vulnerable without fear of being judged or criticized (Carmeli, Brueller & Dutton, 2009). The concepts of psychological safety and academic burnout are both related to an individual's sense of emotional and mental well-being and have a significant impact on employees' productivity and commitment to their jobs (Obrenovic, Jianguo, Khudaykulov & Khan, 2020). In this context and in light of the above information, the main purpose of this study is to reveal the effects of psychological safety and academic burnout of academics working in public universities in Türkiye on work engagement.

2. THEORETICAL FRAMEWORK

2.1. Psychological Safety

Psychological safety is the extent to which individuals feel secure in their ability to manage change (Schein & Bennis, 1965). Kahn conceptualized psychological safety as an individual's perception of whether he/she is comfortable with asserting and using himself/herself without fear of negative consequences for his/her image, status, or career, and argued that people are more likely to feel psychologically safe when they have trusting and supportive interpersonal relationships with their colleagues (Kahn, 1990). Providing a psychologically safe work environment is one way to overcome threats to individual and organizational learning (Edmondson, 1999). For example, in a longitudinal study conducted by Google's People Analytics Unit, psychological safety was identified as the number one characteristic of successful high-performing teams (Bergmann & Schaeppi, 2016).

In line with the interest of today's organizations towards learning and innovation, psychological safety is gaining importance both theoretically and practically. Psychological safety, which necessarily accompanies uncertainty and change, reduces the risk between individuals. Psychological safety defines the factors that contribute to interpersonal

structure (Edmondson & Lei, 2014; Edmondson, Higgins, Singer & Weiner, 2016).

Organizations are made up of people from different cultures, ideologies, and backgrounds. Groups of people with these differences have been shown to develop more creative solutions to problems (Wanless, 2016; Edmondson, 2018; Clark, 2020; Hunt, Bailey, Lennox, Crofts & Vincent, 2021). Psychological safety is the feeling of comfort of individuals in the field of education. People who are fully committed to the educational process feel better and even put everything they have and everything they have achieved (Khudyakova, Klepach, Yu, Valeeva & Arpentyeva, 2021). In universities, the lack of psychological safety has serious consequences. When academics are uncomfortable talking about ineffective and inefficient changes and initiatives, the institution cannot avoid failure. In this situation, the organization loses the opportunity to use the strengths of all its talents, as academics cannot fully devote themselves to education and training (Tyumaseva et al. 2022). Psychological safety does not mean that everyone is good all the time, but that people accept conflict and speak up knowing that the group supports them and they support the group (Petrosyants, Gridyaeva, Valeeva & Arpentyeva, 2022).

Incorporating psychological safety into organizational culture can have a positive impact on employee engagement, creativity, and overall performance. However, it's important to note that achieving and maintaining psychological safety requires deliberate efforts from leadership, clear communication, and consistent modeling of respectful behavior. As organizations continue to evolve and face new challenges, the concept of psychological safety will likely remain a key consideration in fostering innovation, collaboration, and adaptability.

2.2. Academic Burnout

For the first time, burnout was defined by Herbert Freudenberger as "a state of exhaustion that occurs in the internal resources of the individual as a result of failure, wear and tear, reduction of energy and strength or unsatisfied demands" (Freudenberger, 1974: 159). Maslach & Jackson (1981) conceptualized burnout as a syndrome characterized by emotional exhaustion, depersonalization, and lack of a sense of personal accomplishment.

Academician is one of the professions where face-to-face communication and interaction with people is intense. It is emphasized that academicians are a professional group facing the phenomenon of

burnout both as a result of their intensive communication with students and due to the intense pressures and obstacles in publishing and being successful (Melendez & Guzman, 1983). In this context, academic burnout refers to the chronic stress that occurs in students due to course load, exam anxiety, and other psychological factors (Shih, 2012). Addressing burnout in academia requires a multifaceted approach, including implementing support systems, promoting work-life balance, providing resources for stress management, and fostering a culture of open communication about mental health. Recognizing the challenges that both academicians and students face is an important step in creating a healthier and more sustainable academic environment.

Academic burnout consists of emotional exhaustion, administrative support, academic performance and workload dimensions (Tümekaya, 2000). Emotional exhaustion is an individual's feeling of emotional exhaustion and lack of energy. Administrative support is the individual's evaluation of the level of support and respect provided to him/her by the institution or organisation where he/she works. Academic performance dimension is how effective the individual is in academic or educational tasks and how confident he/she is in this regard. Workload dimension is the amount and difficulty of tasks in the field in which the individual works or receives education (Salmela-Aro, Kiuru, Leskinen & Nurmi, 2009). Academic burnout has become a common problem in the modern student community, affecting both mental and physical health. This can lead to decreased productivity and poor academic performance, as well as a negative impact on general well-being. When psychological safety is lacking in educational settings, it can exacerbate feelings of burnout and create a cycle of stress and anxiety. To reduce the negative effects of burnout and promote academic achievement, educational institutions must prioritize the mental health of their students and promote an environment of inclusion and psychological safety (Çiçek Sağlam, 2011). When employees experience burnout, they may disengage from their jobs and colleagues and even start looking for other job opportunities. Therefore, it is crucial for employers to be aware of the signs of burnout and take steps to prevent it from occurring in the workplace (Maslach & Leiter, 2016). Employers need to recognize the signs of burnout and take proactive measures to prevent it. This involves creating a supportive work environment, addressing workload concerns, and offering resources for managing stress.

Academic burnout is a phenomenon that particularly affects students in high-stress environments such as a university or graduate

school (Özhan & Yüksel, 2021). It is characterized by emotional exhaustion, decreased sense of personal accomplishment, and depersonalization. Burnout can have serious consequences for students, such as low grades, decreased motivation, and even dropping out of school altogether (Pehlivanoğlu & Civelek, 2019). Universities can implement strategies to combat burnout and promote psychological safety in academic settings, such as providing mental health resources, reducing workload, and promoting a healthy work-life balance (Gabriel & Aguinis, 2022). It's worth noting that addressing burnout is not solely the responsibility of universities. Students themselves need to develop self-awareness, effective study habits, and stress management skills.

Academic burnout is a common problem in many workplaces and can significantly affect employees' productivity and mental health. Research has shown that when individuals experience burnout, they are more likely to disengage from their work and experience a decline in performance (Edú-Valsania, Laguía & Moriano, 2022). This is especially true in academic settings where high levels of stress and pressure can lead to feelings of exhaustion and cynicism. To combat academic burnout and promote a positive work environment, employers can implement policies and practices that prioritize employee well-being, such as providing opportunities for mental health support and promoting a culture of work-life balance (Emerson, Hair & Smith, 2023). Academic burnout is a complex issue that requires a multifaceted approach. Employers play a crucial role in preventing and mitigating burnout by implementing policies and practices that prioritize employee well-being and promote a healthy work environment.

2.3. Work Engagement

Work engagement is the employee's willingness to achieve the goals of the organization and to make a great effort with a sustainable workload (Robinson, Perryman & Hayday, 2004). Engagement can also be expressed as the opposite of burnout. Unlike employees suffering from burnout, engaged employees are ineffective connections with their work activities and are more energetic in the work environment. Engaged employees see themselves as individuals who can fulfill the requirements of the job (Schaufeli, 2015). Being engaged at work is based on being energetic, participating in organizational work, and productivity. Engagement is the state of mind of being positive about a certain phenomenon. It is the attitudes developed by employees who cognitively evaluate themselves as a whole with their work, aim to develop sincere relationships with their colleagues, and parallel with

the activities of the organization (Maslach & Leiter, 2008). Work engagement is a multifaceted construct that involves psychological, emotional, and behavioral aspects. Organizations that promote and support employee engagement tend to experience benefits such as higher performance, reduced turnover, and increased job satisfaction.

Work engagement is an important aspect of promoting employee well-being and combating burnout and refers to the extent to which an individual is invested in and enthusiastic about his/her job (Schaufeli, Salanova, González-Romá & Bakker, 2002). When employees are engaged in their work, they are motivated, productive, and less likely to experience burnout symptoms. Managers can encourage engagement by providing a positive and supportive work environment, offering opportunities for autonomy and skill development, and recognizing and rewarding employees' contributions. By prioritizing engagement, employers can not only improve employee well-being but also increase productivity and overall job satisfaction (Bakker, Albrecht & Leiter, 2011). Prioritizing work engagement is indeed a win-win situation for both employees and employers, contributing to a healthier work environment, improved performance, and sustained organizational success.

Vigor is the first sub-dimension of work engagement and refers to how energetic and lively a person feels about his/her work. Vitality emerges as a result of a passionate approach to work. Dedication is the second sub-dimension of work engagement and refers to how committed a person feels to his/her job. Dedication reflects a situation in which a person is emotionally attached to his/her job and attaches great importance to it. Absorption is the third sub-dimension of work engagement. Absorption reflects a situation in which the person focuses on the tasks at work, loses himself/herself to the difficulties of the job and enjoys doing the job (Schaufeli, Bakker & Salanova, 2006).

Work engagement is an important component of avoiding academic burnout. It is a feeling of being energized and dedicated to job responsibilities that enable individuals to maintain their focus and productivity (Schaufeli & Bakker, 2004). To improve work engagement, employers and organizations can provide opportunities for skill development and allow employees and students to take on tasks that challenge them. Furthermore, fostering a culture of appreciation and positive feedback can go a long way in increasing work engagement and preventing burnout (Bakker & Demerouti, 2008). Organizations and educational institutions should continuously assess and adjust

their strategies based on feedback and evolving needs to ensure a sustainable and healthy environment for their employees and students.

Work engagement is a potential solution to combat academic burnout and promote a healthy work environment. When employees are engaged in their work, they are more likely to feel a sense of purpose and motivation, leading to increased productivity and overall job satisfaction (Bakker, Demerouti & Sanz-Vergel, 2014). To promote work engagement, employers can provide opportunities for skill development and growth, recognize and reward employee achievements, and encourage open communication and collaboration among team members. By prioritizing work engagement, employers can create a positive work environment that supports employee well-being and academic success (Kim & Jung, 2022). By implementing strategies such as skill development, recognition, and collaboration, employers can create an environment that promotes both employee well-being and academic success.

Work engagement is a critical factor in combating burnout and promoting well-being among both employees and students. By developing a sense of purpose and connecting with their work, individuals can increase their motivation and job satisfaction and ultimately reduce the risk of burnout (Schaufel, Taris & van Rhenen, 2008). Encouraging employees to take breaks and engage in self-care activities can also help prevent workplace fatigue and cynicism. By prioritizing engagement and employee well-being, organizations can create a positive and productive work environment (Yang & Chen, 2023). In summary, cultivating work engagement and employee/student well-being is a proactive approach that organizations and educational institutions can take to promote mental health, prevent burnout, and create a more productive and harmonious environment.

In addition to addressing burnout, ensuring work engagement is also critical to fostering a positive work environment. Work engagement refers to an employee's dedication and enthusiasm for their job and has been shown to increase productivity, creativity, and job satisfaction (Bakker & Oerlemans, 2016). Employers can increase engagement by providing employees with professional development opportunities, recognizing and rewarding good work, and encouraging open communication and collaboration among colleagues. By prioritizing both employee well-being and engagement, employers can create a supportive and productive workplace culture that benefits everyone involved (Kim & Jung, 2022). By prioritizing both well-being and engagement,

employers create a holistic approach to cultivating a positive workplace culture. When employees feel supported, challenged, and recognized, they are more likely to contribute their best efforts and creativity to their roles. This, in turn, benefits the organization as a whole by fostering innovation, reducing turnover, and enhancing overall performance.

3. RELATIONSHIP BETWEEN VARIABLES AND FORMULATION OF HYPOTHESES

3.1. The Relationship between Psychological Safety and Work Engagement

Creating a safe working environment for employees is important for their commitment to work. However, beyond physical safety measures, psychological safety is equally important (Yuanqin, 2020). When employees feel psychologically safe, they are more likely to speak up, share ideas, and take calculated risks without fear of being punished. This level of safety also increases trust within teams and between employees and management (Plouffe et al. 2023). In the workplace, employees want to feel connected and committed to their work, and this can be achieved through psychological safety. This concept means creating a working environment where employees feel comfortable expressing their thoughts, feelings, and ideas without fear of reprisal or judgment. This not only leads to increased job satisfaction but also to increased job performance (Lateef, 2020).

Psychological safety at the workplace is an important factor contributing to work engagement (Kark & Carmeli, 2009). According to recent research, employees who feel psychologically secure in their workplaces tend to show better job performance and are more committed to their jobs. This can be achieved through building trust among co-workers, open communication channels, and providing employees with the resources they need to complete their work (Men, Qin & Jin, 2021). In this way, psychological safety can positively affect not only individual employee performance but also the overall productivity of an organization (Osborne & Hammoud, 2017). Based on the above information, the following hypothesis was formed for the research.

Hypotheses 0: Psychological safety has a significant effect on work engagement.

3.2. The Relationship between Academic Burnout and Work Engagement

In today's fast-paced world, individuals are often expected to do more with fewer resources. The pressures of personal and professional life can lead to great stress and even burnout (Robinson et al. 2023). For those working in the academic sector, the stress created by teaching, publishing, and administrative demands leads to academic burnout (Carroll et al. 2022). Understanding the relationship between academic burnout and work engagement helps to determine prevention and intervention strategies (Bakker et al. 2014). Academic burnout and work engagement are two terms that are becoming increasingly important in today's society. Many people, especially those in high-stress jobs, experience symptoms of burnout, leading to decreased productivity, job dissatisfaction, and other negative consequences (Bosman, Rothmann & Buitendach, 2005). On the other hand, work engagement is the opposite of burnout and is characterized by enthusiasm, motivation, and a sense of purpose in one's work (Appel-Meulenbroek, vander Voordt, Aussems, Arentze & Le Blanc, 2020). According to the information stated above, the following hypothesis was formed for the research.

Hypotheses 1: Academic burnout has a significant effect on work engagement.

3.3. Method

The population of the study is Türkiye. One state university from each region of Türkiye was selected for the sample. The study was conducted on 424 academics working in these regions selected for the sample. Academics were selected according to convenience sampling method. The sensitivity of the estimation is 0.05. The data collection tool is the questionnaires created over the link and delivered by the authors. The application method of data collection tools is the online method. A five-point Likert-type scale was used to measure the research variables. The data collected from 424 academicians were analyzed with SPSS software.

Since the "distance education" system was switched to the "distance education" system due to the great earthquake that took place in the 2023/February period covering 11 provinces and since physical access to all academic units throughout the country would be very difficult and costly, face-to-face communication was used in filling out the questionnaires, as well as WhatsApp groups formed by academics and universities within themselves. For this reason, the questionnaire was both physically printed and its electronic form was prepared via "google survey". To use the survey questions related to the collection of data, firstly, "Ethics Committee Permission" dated 16.05.2023

and numbered 2023/167 was obtained from Afyon Kocatepe University Ethics Committee.

The psychological safety scale developed by Edmondson (1999) and adapted into Turkish by Bülbül, İşıaık & Aytaç, (2022) was used in the study. Psychological safety scale consists of seven items and one dimension.

The academic burnout scale, which was based on the studies of Maslach & Jackson, (1981) and Seidman & Zager, (1986-87) and adapted into Turkish by Tümkaya (2000), was used in the study. The academic burnout scale consists of 39 items and four dimensions (emotional exhaustion, administrative support, academic performance and workload).

In the study, the work engagement scale adapted into Turkish by Köse (2015) was used. The work engagement scale consists of 17 items and two dimensions.

All scales used in the study were authorized by the authors.

4. FINDINGS

4.1. Distribution of Demographic Characteristics

When Table 1 is analysed, it is seen that 236 of the participants are female with a rate of 55.7%, 188 of the participants are male with a rate of 44.3%, 49.5% of the participants are in the 36-45 age range, and the least number of participants is over 56 years old with a rate of 8.5%. It is seen that the majority of the participants are married with a rate of 75,5% and the remaining 24,5% are married. It is seen that 36,3% of the participants are Asst. Prof. Dr. with the highest rate of 36,3% and lecturer with the lowest rate of 5,7%. It is understood that the research fields of the participants are social sciences with 85.8%, science with 8.5% and health sciences with 5.7%. Regarding the working period in the institution, it is seen that the participants have been working between 11-15 years with a rate of 28.8% and the least with a rate of 4.2%.

4.2. Explanatory Factor Analysis

In Table 2, exploratory factor analysis was applied to test the construct validity of the scales. Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's test of sphericity were used to examine the suitability of the data for factor analysis.

Table 1: Distribution of Demographic Characteristics

		Count	Column N %
Gender	Female	236	55,7%
	Male	188	44,3%
Age	26-35	88	20,8%
	36-45	210	49,5%
	46-55	90	21,2%
	56 +	36	8,5%
Marital Status	Married	320	75,5%
	Single	104	24,5%
Education Status	Undergraduate	2	0,5%
	Postgraduate	90	21,2%
	Doctorate	332	78,3%
Academic Title	Research Assist.	24	5,7%
	Lecturer	118	27,8%
	Asst. Prof. Dr.	154	36,3%
	Associate Prof.	88	20,8%
	Professor	40	9,4%
Field of Study	Social Sciences	364	85,8%
	Sciences	36	8,5%
	Health Sciences	24	5,7%
Length of Work	1-5 years	58	13,7%
	6-10 years	104	24,5%
	11-15 years	122	28,8%
	16-20 years	54	12,7%
	21-25 years	40	9,4%
	26-30 years	28	6,6%
	31 +	18	4,2%

As seen in Table 2, the Kaiser-Meyer-Olkin values of the psychological safety scale were calculated as 0.930, the KMO value of the academic burnout scale as 0.897, and the KMO value of the work engagement scale as 0.912. Since the KMO values are above 0.60, it can be accepted that the data obtained from the sample is sufficient. The fact that

the p-value is less than 0.05 in Bartlett's test result shows that the relationship between the items of the scales is suitable for factor analysis.

As in the original psychological safety scale, a single factor is reached. According to Table 2, the single factor explains 72.46% of the total variance.

Table 2: Kaiser-Meyer-Olkin and Bartlett's Sphericity Test Results

Variables	Kaiser-Meyer-Olkin	Bartlett's Test of Sphericity			Variance
	(KMO)	χ^2	sd	p	%
Psychological Safety	0,930	2274,46	21	0,000	72,46
Academic Burnout	0,897	984,69	741	0,000	66,34
Work Engagement	0,912	4536,54	136	0,000	64,01

The original academic burnout scale consists of four factors: emotional weakness, managerial support, academic performance, and workload. In line with the results of the analysis of the data collected in the study, eight factors were reached in total, not four factors as in the original scale. This finding is thought to be due to the responses of the sample to the scale items. According to Table 2, eight factors explain 66.34% of the total variance.

According to the analysis of the data, the original scale of work engagement consists of two factors: job view and job attendance. As a result of the analysis of the data, not two factors as in the original scale, but three factors in total were reached. This finding is thought to be due to the responses of the sample to the scale items. According to Table 2, three factors explain 64.01% of the total variance.

For the exploratory factor analysis, the tables showing the factor loadings of each item in the three scales are shown below.

Table 3: Communalities

	Initial	Extraction
AB1	1,000	,668
AB2	1,000	,623
AB4	1,000	,687
AB5	1,000	,620
AB7	1,000	,516
AB8	1,000	,711
AB9	1,000	,817
AB11	1,000	,655
AB12	1,000	,762
AB13	1,000	,578
AB14	1,000	,639
AB15	1,000	,742
AB16	1,000	,745
AB17	1,000	,743
AB18	1,000	,501
AB19	1,000	,690
AB20	1,000	,726
AB21	1,000	,666
AB22	1,000	,609
AB23	1,000	,506
AB24	1,000	,690
AB25	1,000	,513
AB26	1,000	,694
AB27	1,000	,677
AB28	1,000	,600
AB31	1,000	,631
AB33	1,000	,755
AB34	1,000	,694
AB35	1,000	,641
AB36	1,000	,664
AB37	1,000	,521
AB38	1,000	,746
AB39	1,000	,723

Table 4: Communalities

	Initial	Extraction
PS1	1,000	,679
PS2	1,000	,734
PS3	1,000	,705
PS4	1,000	,787
PS5	1,000	,728
PS6	1,000	,726
PS7	1,000	,713

Table 5: Communalities

	Initial	Extraction
WE1	1,000	,548
WE2	1,000	,562
WE3	1,000	,569
WE4	1,000	,745
WE5	1,000	,755
WE6	1,000	,561
WE7	1,000	,666
WE8	1,000	,557
WE9	1,000	,724
WE10	1,000	,600
WE11	1,000	,660
WE12	1,000	,606
WE13	1,000	,650
WE14	1,000	,748
WE15	1,000	,598
WE16	1,000	,589
WE17	1,000	,745

4.3. Reliability and Normality Analysis Results

To determine the reliability of the scales, Cronbach's Alpha coefficients should be analyzed. Table 6 below shows how many items the scales consist of, Cronbach's alpha coefficients, the mean responses to the scales, and standard deviations.

When the reliability analysis of the academic burnout scale was performed, firstly, it was seen that the Cronbach alpha coefficient was 0.553, and since this number was lower than 0.70, the scale items with low reliability were identified, which would increase the Cronbach alpha coefficient. Out of 39 items on the academic burnout scale, items numbered 3, 6, 10, 29, 30, and 32 were removed from the scale, and analyses were continued with 33 items. Thus, the reliability coefficient of the academic burnout scale was determined as 0.713.

Table 6: Reliability and Normality Analysis Results

	Number of Items	Cronbach Alpha	Mean	Standart Deviation	Min.-Max.
Psychological Safety	7	0,936	2,86	1,031	1 - 5
Academic Burnout	33	0,713	3,11	0,364	1 - 5
Work Engagement	5	0,928	3,9	0,629	1 - 5

As can be seen in Table 6, the reliability coefficient of the psychological safety scale was found to be 0.936 and the scale of work engagement was found to be 0.928. It is seen that the internal consistency values of the items in these scales are higher than the generally accepted value of 0.70.

Before conducting correlation analyses, it is necessary to determine whether the data meet the

5. RELATIONSHIP BETWEEN VAIRABLES

The results of the correlation analysis performed to determine the relationships between variables and the direction and severity of these relationships are given in Table 8.

Table 7: Normality Test Results

	Kolmogorov-Smirnov			Shapiro-Wilk			Skewness	Kurtosis
	Statistic	df	Sig.	Statistic	df	Sig.	Statistic	Statistic
Psychological Safety	0,066	426	0,000	0,977	426	0,000	0,070	-0,557
Academic Burnout	0,063	426	0,000	0,987	426	0,000	0,277	-0,138
Work Engagement	0,077	426	0,000	0,974	426	0,000	-0,452	0,118

normality assumption. For this purpose, the collected data were subjected to normality tests.

In deciding whether to use parametric or nonparametric tests for the analysis, for sample sizes larger than 300, the absolute values of skewness and kurtosis are considered without considering z values (Özkan & Salepçioğlu, 2022). According to Lorcu (2015), Skewness and Kurtosis values should be between +1 and -1.

Since the p values were less than 0.05 in Kolmogorov-Smirnov and Shapiro-Wilk normality tests, skewness and kurtosis values were examined. When Table 7 is analyzed, the skewness and kurtosis values of psychological safety, academic burnout, and work engagement scales are between +1 and -1. When the graphs are analyzed, it can be stated that a normal distribution is observed and the determined figures are confirmed. Thus, it was decided to use parametric tests for all three scales.

When Table 8 is analyzed, it is seen that there is a low positive relationship between psychological safety and work engagement scores ($r=0,197$; $p<0,05$). There is a low negative relationship between psychological safety and academic burnout ($r=-0,240$; $p<0,05$). There was no significant relationship between academic burnout and work engagement variables ($p>0,05$).

6. REGRESSION ANALYSIS

The study aims to examine whether psychological safety and academic burnout affect work engagement. Multiple linear regression analysis was performed to predict work engagement according to psychological safety and academic burnout. The results of the regression analysis are given in Table 9.

Table 8: Analysing the Relationships Between Scales

Variables	N	r	p
Psychological Safety	424	0,197**	0,000
Work Engagement			
Psychological Safety	424	-0,240**	0,000
Academic Burnout			
Academic Burnout	424	-0,085	0,079
Work Engagement			

**: $p < 0,01$ r: Pearson Correlation Coefficient

r	Relationship Level	Relationship Direction
0,00	None	$r = -$ negative relationship
0,01 – 0,29	Low	$r = +$ positive relationship
0,30 – 0,69	Medium	
0,70 – 0,99	High	
1	Perfect	

Source: (Özkan, 2021).

According to the results of the analyses, psychological safety is a significant predictor of work engagement ($F(2, 421) = 9.925, p < 0.05$). However, academic burnout is not a significant predictor of work engagement ($p > 0.05$). Therefore, both variables do not affect work engagement separately, only psychological safety has a significant effect on work engagement. The predictive level of psychological safety on work engagement is $\text{Beta} = 0.196$. The psychological safety variable explains 4.5% of the variance in work engagement ($R^2 = 0.045$). According to the results of the analysis, the equation predicting work engagement can be expressed as follows:

Work engagement = $3,828 + (0,117 * \text{Psychological safety})$

education. This is particularly true for public universities in Türkiye, where factors such as increased workload, lack of resources, and limited career opportunities can contribute to feelings of frustration, burnout, and turnover among academic staff. Academic burnout can have a significant impact on commitment to work as well as lead to decreased productivity and job satisfaction. In light of these challenges, it is important to explore potential solutions that can help improve the psychological safety of academic staff and promote a more positive workplace environment. To increase employee engagement in public universities in Türkiye, it is important to focus on creating a workplace culture that promotes psychological safety and supports individuals to avoid academic burnout.

Table 9: Multiple Linear Regression Analysis Results

	B	Std Error	Beta	t	Sig.	R	R ²	F	Sig.
Psychological Safety	0,117	0,029	0,196	3,993	0,000	0,212	0,045	9,925	0,000
Academic Burnout	-0,080	0,083	-0,047	-0,963	0,336				

7. CONCLUSION AND DISCUSSION

In recent years, the issue of academic burnout has become increasingly prevalent in the field of higher

As a result of the research, it is seen that there is a low positive relationship between psychological safety and job commitment scores. The finding of a low positive relationship between psychological safety and work engagement scores indicates that there is a relationship between employees'

emotional commitment and their trust in their jobs. This finding suggests that work engagement is influenced by many factors and psychological safety is only one factor. The low positive relationship means that an increase in psychological safety can contribute to an increase in work engagement, but this effect is not very significant. Therefore, managers and organizations that want to increase employees' job engagement at workplaces should not only deal with psychological safety, but also with other factors that increase job satisfaction. The combination of these factors can help employees to reach a higher level of work engagement. It is understood that there is a low negative relationship between psychological safety and academic burnout. The low negative relationship between psychological safety and academic burnout may involve many factors that can make employees' work or learning experiences more positive and healthy. This finding emphasises the importance of promoting emotional support and safety to create a healthier and more satisfying environment in work or learning spaces. It was determined that there was no significant relationship between academic burnout and work engagement variables. The low negative relationship between psychological safety and academic burnout shows that these two concepts are inversely proportional to each other. This relationship between the two concepts indicates that as psychological safety increases, academic burnout decreases. This finding may represent a way to increase students' academic achievement and emotional well-being by meeting their emotional and psychological needs in educational settings. Based on research, psychological safety refers to the existence of an environment in which individuals can express themselves, express their thoughts, take risks, and accept their mistakes. In such an environment, students may gain more motivation, perceive their learning experience in a positive way, which may reduce academic burnout. Especially when students feel supported by their teachers or educational institutions, they tend to experience less burnout. According to the regression analysis results, psychological safety is a significant predictor of work engagement. However, academic burnout is not a significant predictor of work engagement. These findings help us understand the effects of the relationships between psychological safety and academic burnout on work engagement. The findings suggest that work engagement is related to psychological safety, but not a similar relationship with academic burnout. This may indicate that it is important for organizations to promote psychological safety in order to increase their employees' work engagement. The fact that academic burnout does not significantly predict work engagement suggests

that academic burnout is a more common problem, especially for those working in the education sector, and may have a negative impact on employees' work engagement.

The relationship between psychological safety and academic burnout is an understudied area. However, some research suggests that increased feelings of psychological safety may reduce academic burnout. This may mean that if employees feel psychological safety in their workplaces, academic burnout may decrease. When the findings of our study are compared with the findings of other studies, a study conducted by Luthans, Youssef & Avolio (2007) found that psychological safety has a positive relationship with increased work engagement. The participants stated that an increase in psychological safety creates a greater sense of commitment at work. The "Burnout Syndrome" model developed by Maslach and Leiter (2008) suggests a negative relationship between academic burnout and work engagement. According to this model, increased feelings of burnout negatively affect feelings of commitment to work. The study also shows that psychological safety has a positive effect on work engagement. This result is consistent with other studies in the literature (Edmondson, 1999). Psychological safety can encourage employees to be more committed to their jobs because it can reduce fears about expressing themselves and contributing.

When compared with other studies in the literature, these results provide an important contribution to the literature. In particular, these findings are important in terms of understanding the level of work engagement of employees in public universities in Türkiye. However, there are some limitations regarding the generalisability of these results. For example, this study was conducted only in public universities in Türkiye and different results may be obtained in other sectors or countries.

In conclusion, this article shows that psychological safety has a positive effect on work engagement and academic burnout is not a significant predictor in this context. These results emphasise the importance of making efforts to increase psychological safety in the workplace. The study also contributes to the literature on psychological safety, which has the potential to have a positive impact on work engagement and employees' emotional well-being.

Future Research

Based on the research findings, there are several recommendations to address the issue of

psychological safety and academic burnout among academics in public universities in Türkiye. First, institutions should recognize the importance of creating a work environment that supports psychological safety by encouraging open communication and providing support to employees. Secondly, interventions such as stress management and work-life balance programs should be implemented to help academics prevent burnout. Furthermore, providing opportunities for professional development and career progression can increase job satisfaction and reduce the risk of burnout. In addition, the relationship between psychological safety and academic burnout needs to be further explored, as this may help to distinguish which factors contribute more to reduced engagement. Interventions designed to enhance psychological safety and prevent burnout should be explored, with a particular focus on culture-specific approaches given the unique context of public universities in Türkiye. Finally, longitudinal studies following the impact of these interventions may provide insights into their effectiveness and sustainability in increasing work engagement among academics.

ETHICS DECLARATIONS

Funding: No grant funding was obtained or utilized for the completion of this study.

Conflict of interest: The author declares that she has no conflict of interest.

Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. Ethics Committee Approval was obtained for this research from the Afyon Kocatepe University Research Ethics Committee with the date of May, 16 and the decision number 2023 / 167.

Informed Consent: Informed consent was obtained from all individual participants included in the study.

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