

THE ROLE OF WORKPLACE SOCIAL COURAGE IN DEVELOPING INNOVATIVE WORK BEHAVIORS

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Abstract

In today's world, where development and change are experienced rapidly, employees need to provide the necessary support to their organizations by displaying innovative work behavior (IWB) in the information sector, where keeping up with the change has become even more important. The main purpose of the study is to reveal the role of workplace social courage in developing IWB of IT sector employees and to determine the effects of workplace social courage (WSC) on employees' IWB. In this context, data were collected from the first 100 IT sector employees. Data obtained from the information sector employees determined by the convenience sampling method, it was concluded that the level of WSC and IWB of the information sector employees is high. It is seen that WSC has a positive, and significant relationship with the IWB levels of the employees, and WSC positively affects the IWB of the employees. In the research, it was concluded that employees with high WSC in the IT sector exhibit more IWB. WSC and IWB of IT sector employees do not differ according to gender and professional experience.

Keywords: Innovative work behavior, courage, workplace social courage, IT sector.

JEL Sınıflandırılması: M10, M11, M19

Öz

Gelişimin ve değişimin hızla yaşandığı günümüz dünyasında, değişime ayak uydurmanın daha da önemli bir hal aldığı bilişim sektöründe, çalışanların yenilikçi iş davranışı sergileyerek, örgütlerine gereken desteği vermeleri önem arz etmektedir. Çalışmanın temel amacı, bilişim sektörü çalışanlarının yenilikçi iş davranışı geliştirmelerinde işyeri sosyal cesaretlerinin rolünü ortaya koyabilmek, çalışanların işyeri sosyal cesaretlerinin yenilikçi iş davranışları üzerindeki etkilerini belirleyebilmektir. Bu kapsamda, ilk 100

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bilişim sektörü çalışanlarından, veriler toplanmıştır. Kolayda örnekleme yöntemiyle belirlenen bilişim sektörü çalışanlarından elde edilen verilerin analizi sonucunda, bilişim sektörü çalışanlarının, işyeri sosyal cesareti ve yenilikçi iş davranışı düzeylerinin yüksek olduğu sonucuna ulaşılmıştır. Bununla birlikte işyeri sosyal cesaretinin çalışanların yenilikçi iş davranışı düzeyleri arasında pozitif yönde, olumlu ve anlamlı bir ilişki olduğu, işyeri sosyal cesaretinin çalışanların yenilikçi iş davranışlarını olumlu yönde etkilediği görülmektedir. Araştırmada bilişim sektöründe sosyal cesareti yüksek olan çalışanların daha fazla yenilikçi iş davranışı sergilediği sonucuna ulaşılmıştır. Bilişim sektörü çalışanlarının işyeri sosyal cesareti ve yenilikçi çalışma davranışları cinsiyete ve mesleki deneyime göre farklılık göstermemektedir.

Anahtar Kelimeler: Yenilikçi iş davranışı, cesaret, işyeri sosyal cesareti, bilişim sektörü

JEL Sınıflandırması: M10, M11, M19

Extended Summary

In today's world where development and change are experienced rapidly, employees need to provide the necessary support to their organizations by displaying IWB (IWB) in the information sector, where keeping up with the change has become even more important. Employees can exhibit WSC behavior in their business life to contribute to their organizations and to reach their individual goals. Based on this idea, the research aims to determine the role of WSC behavior in developing IWB. Relationships between employees' social courage in the workplace and IWB development; play an important role in organizing the organizational structure. In this respect, it is expected that the disclosure of the subject will contribute to the relevant literature and the leaders at the management level of the organization. The main purpose of the study is to reveal the role of WSC in developing IWB of IT sector employees and to determine the effects of workplace social courage (WSC) on employees' IWB. However, developments in the field of information and communication focus on turning to the field of informatics and revealing innovations. In this context, considering that creating innovative jobs is an important need in the field of informatics, it was decided that it would be appropriate for the universe of the research to consist of IT sector employees. The population of the research consists of the employees of the first 100 IT companies (according to their sales revenues) stated in the report published by BTHaber (2021: 132). According to November 2022 data, the number of paid employees in the information and communication sector in Turkey is 287,273. The research data was obtained through a questionnaire form; 220 responses were provided to the 500 questionnaires sent, and after the extreme values were removed, analyzes were made from the information about 209 informatics employees. When the literature is examined, it is stated that the sample size should be at least five times the number of variables used in the research (Büyüköztürk, 2002; Aksu et al., 2017; Özdemir & Atan, 2020). In this context, it is seen that the collected data meet the sample size. The surveys created through Google Forms were shared with the IT sector employees through LinkedIn and other social media platforms throughout January and February 2023, and they were applied in a digital environment. The questionnaire form prepared in line with the purpose of the research consists of 3 parts: Personal information form, IWB scale form, and WSC scale form. Data obtained from the information sector employees determined by the convenience sampling method, it was concluded that the level of WSC and IWB of the information sector employees is high. It is seen that WSC has a positive, and significant relationship with the IWB

levels of the employees, and WSC positively affects the IWB of the employees. In the research, it was concluded that employees with high WSC in the IT sector exhibit more IWB. It was concluded that gender and professional experience, which are among demographic variables, do not differ in the WSC and IWB of IT sector employees.

1. Introduction

Socio-economic transformation necessitates a change in every field. With the changes in competitive conditions, organizations' ability to create opportunities in the market area depends on innovation and value creation. Thus, it is possible to make a difference in the activities, goods, and services of organizations compared to their competitors. To focus on differentiation and revealing value in business processes and achieve this, it is necessary to combine all organizational elements in common goals and sharing. With the transformation of the organizational system; processes, business methods, technological infrastructure, and capabilities are changing rapidly. The inevitability of change pushes organizations to adapt to this change more quickly. For this reason, organizations are to have a workforce that can take risks in their working lives, produce and implement creative and innovative ideas in order not to remain unfamiliar with these changes and developments, and catch up with the requirements of the age.

Today, the competence levels of the abilities of organizations are gaining more importance. Although the developing technology can perform many physical tasks, mental performance is needed to reveal new ideas, inventions, or methods. In other words, the role of innovative ideas emerging in organizations is extremely important in differentiating organizations and seizing the opportunity against their competitors. As it is known, innovation is one of the most important keywords of our age. For this reason, there is a need to develop creative ideas and, accordingly, innovative behaviors in organizations. In this sense, revealing innovative behaviors in organizations or ensuring and maintaining the commitment of innovative talents to the organization may emerge as a problem. Similarly, what is the needs of the talents who can exhibit innovative behavior and how the organizational structure should be created in this context are also a problem. When the relevant literature is examined; the moderate climate created in the organization (Çalışkan, 2013; Howard & Fox, 2020), a transparent, democratic management structure (Amabile et al., 1996; Oğan, 2022), information sharing (Sözbilir, 2018; İmamoğlu, 2019), employee voice status in the organization (Kanten et al., 2022) that is, the elements that make up the culture are seen to be effective in developing IWB. From this point of view, the IWB in the organization where studies in the field of management have been intensified recently; was aimed to investigate whether WSC, which reflects organizational culture, affects or not. Organizational employees can exhibit WSC behavior in their business life to contribute to their organizations and to reach their individual goals.

WSC is thought to be the premise of employees' ability to exhibit IWB in the organization to contribute to organizational goals and achieve their individual goals. As it is known, WSC is the whole of behavior that includes the emotions, cognitions, and actions that employees display at the

risk of being harmed for the sake of their goals. Studies on courage are based on the embedded theory, which states that the most important antecedent of individuals' risk-taking decisions to achieve their goals is the perception of benefit and risk (Köksal et al., 2022). WSC behavior, which is examined based on embedded theory; is desired to prove that it is a premise that enables employees to exhibit IWBs in the organization and, when necessary, to go beyond organizational culture, organizational structure, and organizational norms, to exhibit IWBs.

Based on this idea, the research aims to determine the role of WSC behavior in developing IWB. Relationships between employees' social courage in the workplace and developing IWB; are considered important in terms of guiding the reorganization of the organizational structure and environment. In this respect, it is expected that the disclosure of the subject will contribute to the relevant literature and the leaders at the management level of the organization.

2. Conceptual Framework and Hypotheses Development

2.1. Innovative Work Behavior

The concept of innovation is expressed as a process involving the discovery of something that did not exist before or a significant change in the characteristics of an existing thing (OSLO, 2005). The innovation in question can occur as a product/service, or as a marketing method, business model, or application style. In other words, innovation is expressed with different definitions in terms of the field in which it is applied. Moguee & Schact (1980) defines innovation as improving something with technological advances. Obeso et al., (2013) state that innovation is a process of change stemming from environmental effects. In line with the definitions made, it can be said that innovation is a behavioral process that emerges with the support of technological developments under certain conditions and at a certain maturity level. Although innovation and creativity are sometimes used interchangeably, they are related. Innovation can be revealed through creativity. The emergence of new ideas, new methods, new products, or new technologies is possible with creative thinking behavior (West & Farr, 1989; Barker, 2002). Revealing innovation is an important strategy for organizations (Drucker, 1988). The existence of creative talents in the organization provides a competitive advantage (İraz, 2005). For this reason, it is necessary to support innovative behaviors in organizations. In the innovation performance of the organization; employees' creative thinking plays an important role (Li & Zheng, 2014; Özbezek, 2021; Şenol, 2022). Innovative business behavior can be expressed as an effort to reveal new ideas, products, and services with all organizational elements in line with the goals of the organization (Çevik & Akgemci, 2019). From this point of view, it can be said that IWB in organizations emerges with changes in the environment, differentiation in employee abilities, and organizational information sources (Obeso, 2013). IWB highlights employees who follow current developments in line with organizational strategies and focus on their work in this direction (Töre, 2017). The critical value of human resource capital, which exists in each process of the organization, is gradually increasing.

Developing the IWB of the organization; depends on the leaders and their followers who direct the activities of the organization (De Jong, 2007; Şenol, 2022). It is known that some elements support the development of IWB in the organization. These elements are; it is the characteristics and abilities of the managers who determine the organizational strategies and the employees who implement the strategies they have determined (Palmer & Kaplan, 2007). For employees to create innovation with their creativity, motivating and appropriate job design should be realized (Oğan, 2021). Likewise, the autonomy granted to employees while performing their jobs contributes to the development of IWB in organizations (De Jong & Kemp, 2003). Some studies have also shown that the motivation levels of employees, that is, their adoption of the job and their orientation towards a common goal, affect the level of performance they reveal. For example, it is stated that the intrinsic motivation levels and professional experiences of employees affect IWB (Wang, 2013). The role of leaders who observe IWB and can analyze well and share the knowledge gained is considered extremely important (Dyer et al., 2011; Akgül, 2019; Erdem, 2021). For this reason, the level of leadership in all elements of the organization is also a source of motivation, so employees need to develop their IWBs.

When considered in terms of demographic variables, it is stated that IWB does not differ according to gender. In addition, when the employees are examined in terms of their professional experience, it is seen that the rate of IWB of experienced employees is high (Eröz & Şittak, 2019). Based on the findings; “H₁: IWB differs according to the demographic characteristics of the employees”; “H_{1a}: IWB differs according to the gender of the employees”; “H_{1b}: IWB differs according to the professional experience of the employees” hypotheses were created.

2.2. Workplace Social Courage

Courage, as a word, means bravery, assertiveness, and audacity (TDK, 2022). It can be said that courage is a feeling found in the genes as an instinctive behavior since the existence of humanity. Courage varies according to people's perceptions. At the same time, it can be a situation that one person sees bravely, and it can be perceived as crazy by another. Although the place of courage in human life dates back to ancient times, it is possible to say that the concept of courage is considered a science in the literature, which is quite new. Courage is addressed in different areas with moral and personality dimensions. This is due to the deep meaning of courage. For this reason, when the relevant literature is examined, it is seen that there are different definitions of courage. Rate et al. (2007) define courage as a situation in which individuals take risks, perhaps out of fear, but voluntarily, to have or protect a right, favor, or positive thing for themselves or others, in a negative and potentially dangerous situation. Scientists such as Maddi, (2006) and Lopez, (2007) draw attention to the psycho-social meaning of courage in terms of turning to logical results with a mental process in the face of a feared situation.

Kilmann et al. (2010), on the other hand, state that courage is the whole of behavior that includes emotions, cognitions, and actions that the employee takes the risk of being harmed for a noble cause. Recently, it is seen that the concept of courage has started to be discussed in the field of

management sciences, especially its reflections on the organizational climate and organizational effectiveness (Ginevra et al., 2020; Kramer & Zinbarg, 2019; Howard, et al., 2017). Workplace courage in organizational life; can be defined as the behavior of taking action deliberately in the face of risks, threats, or obstacles that may occur while trying to achieve goals that are attributed to morally valuable (Koerner, 2014; Howard & Holmes, 2019). A brave behavior exhibited in the organization; means to be free to exhibit the behavior, to take the risk of being harmed, to believe that the risk is bearable, to believe that the courageous act is justified, to pursue valuable goals, and to take careful steps despite the fear experienced (Kilmann et al., 2010; Koerner, 2014).

WSC is observed in the behavior of members and affects the organizational climate. Therefore, WSC can be seen as an element of organizational culture. Scientific studies on WSC also focus on the relationship between organizational culture and organizational behavior (Mert, Şen, & Alzghoul, 2021; Howard & Fox, 2020; Uysal & Bayramoğlu, 2022; Köksal, Mert & Gürsoy, 2022). In this sense, WSC, which we can attribute to the opposite of organizational silence behavior, is the situation in which employees can stand up to the injustice done by not staying silent when they are faced with injustice in the organization, and for this, the employee exhibits a brave behavior. WSC is seen as a virtuous quality that leaders/managers should have in organizations that adopt a contemporary management approach. It is a supporter of leaders/managers in their fight against undesirable behaviors in organizations (Detert & Bruno, 2017). Similarly, social courage in the workplace is effective in the behavior of employees and managers, and it guides managers to be fair in their decisions; it is seen that it plays an active role in the management of organizational conflict and in the failure of employees to submit to injustice when they are faced with injustice at work (Köksal, Mert & Gürsoy, 2022: 33). In addition, there is a dominant opinion that WSC plays an important role in organizational success and that organizational employees' having high WSC will have a possible effect on their high performance (Kilmann et al., 2010).

Studies also show that employees who display bold behaviors in the workplace influence other employees who observe them. Employees who act to protect their rights and the interests of their colleagues and exhibit courageous behaviors including risk-taking gain self-respect, on the other hand, gain the admiration of their colleagues (Koerner, 2014). In terms of demographic characteristics, it is seen that male employees exhibit a higher level of workplace SCB than female employees (Köksal et al., 2022). In this situation; there may be different reasons such as the existence of some deficiencies in women's employment rights or the fear of losing a job.

Based on the findings; “H₂: WSC differs according to the demographic characteristics of the employees”; “H_{2a}: WSC differs according to the gender of the employees”; “H_{2b}: WSC differs according to the professional experience of the employees” hypotheses were formed.

Different reasons push the employees of the organization to exhibit SCB in the workplace. Among these reasons, the existence of the potential for conflict in organizations can be counted. As it is known, employees with different perspectives from different cultures come together to realize a common goal in organizations. This situation can cause power struggles and conflicts within the organization

(Klein & Napier, 2003; Kilmann, O'Hara & Strauss, 2013). Employees must exhibit workplace courage to express problems related to power struggles and conflicts that may occur in organizations, to defend those who have been wronged, and to fight against negative business behaviors such as mobbing and corruption. Similarly, the high sense of risk that the work environment imposes on individuals will lead employees to display courageous behaviors at work. For most employees, work is at the center of life and is an element that fulfills a range of instrumental, psychological, and social needs. This wide-ranging meaning that the employee imposes on his/her job will lead to the fact that the perceived risks in the courageous behaviors to be exhibited in the workplace are so extensive that they can threaten the employees' livelihoods, friendships, reputation, career, and personal identity.

2.3. The Relationship Between IWB and WSC

Innovative behavior has critical importance in today's competitive environment that brings sustainability to organizational activities (Damanpour & Wischnevsky, 2007; Carmeli & Spreitzer, 2009). Innovative culture brings a proactive feature to organizational activities. New ideas, products, strategies, and services give the organization a competitive advantage (Iraz, 2005). Organizations must have an innovative structure in increasing the performance of employees and producing quality goods and services (Shayah & Zehou, 2019). In addition, it is stated that the emotions of the employees affect their organizational behaviors and organizational success (Kilmann et al., 2010). Employees in the organization are critical elements that undertake all kinds of production. For this reason, it is necessary to identify and develop other factors that shape the behavior of employees. The positive behavior of the employees along with their feeling good also reveals the moderate organizational climate (Yuan & Woodman, 2010). Thus, it will be able to lead the organization to holistic success by influencing the culture, structure, and processes to be created in the organization (Angadi & Naik, 2011).

It is possible to say that one of the most important elements supporting innovative activities in the organization is the possession of developing technologies. Studies are showing that adopting and applying technology is associated with revealing innovative behaviors in the organization (Heinze & Heinze, 2018). For this reason, it is necessary to implement principles and policies that support and protect innovation in the structure and processes of the organization (Barker, 2002). The decision-making positions in the organization must determine the strategies to reveal the IWBs of the employees. For the applicability of innovative strategies, innovative and flexible structures that are open to information sharing, and giving importance to the thoughts of the employees are needed (Adair, 2008). At the same time, the perspective that contributes to the professional and personal development of employees by supporting their continuous learning also supports the increase of motivation in the organization and the creation of a moderate organizational climate (Sözbilir, 2018).

Collaboration among employees in the performance of organizational activities and the need for employees to exhibit innovative behavior can be counted among the reasons that push the employees of the organization to exhibit social courage behavior in the workplace. WSC plays a critical role

in collaborative work that supports innovation and entrepreneurship, which is important for the development of the organization and for it to compete with its competitors in an increasingly competitive environment (Koerner, 2014).

Based on the findings; “H₃: There is a positive significant relationship between WSC and IWB”; “H_{3a}: There is a positive significant relationship between WSC and idea generation”; “H3b: There is a positive significant relationship between WSC and idea promotion”; “H_{3c}: There is a positive significant relationship between WSC and idea realization”, hypotheses were formed.

3. Method

3.1. Aim of Research

The main purpose of this research is to reveal the role of WSC in developing the IWB of IT sector employees. The research is a relational survey in terms of revealing the relationships between facts and events. At the same time, it is a quantitative research method since it is field research aimed at revealing the relationships (Büyüköztürk, 2002). Whether there is any relationship between WSC and IWB within the framework of the main purpose; The sub-objectives of the research are whether WSC affects IWB or whether there is a cause-effect relationship between them.

3.2. Universe and Sample of The Research

With the innovations in Industry 4.0 technologies, important developments have been experienced in the fields of information and communication. In particular, innovation in systems and processes is seen as a necessity of the digital age. However, developments in the field of information and communication focus on turning to the field of informatics and revealing innovations. In this context, considering that creating innovative jobs is an important need in the field of informatics, it was decided that it would be appropriate for the universe of the research to consist of IT sector employees. The population of the research consists of the employees of the first 100 IT companies (according to their sales revenues) stated in the report published by BTHaber (2021: 132). According to November 2022 data, the number of paid employees in the information and communication sector in Turkey is 287,273. The research data was obtained through a questionnaire form; 220 responses were provided to the 500 questionnaires sent, and after the extreme values were removed, analyzes were made from the information about 209 informatics employees. When the literature is examined, it is stated that the sample size should be at least five times the number of variables used in the research (Büyüköztürk, 2002; Aksu et al., 2017; Özdemir & Atan, 2020). In this context, it is seen that the collected data meet the sample size.

3.3. Procedure and Measures

Research data were collected through a questionnaire, which was approved ethically in the meeting of the Scientific Research and Publication Ethics Committee of Artvin Coruh University on 27 December 2022. The surveys created through Google Forms were shared with the IT sector employees through LinkedIn and other social media platforms throughout January and February 2023, and they were applied in a digital environment. The questionnaire form prepared in line with the purpose of the research consists of 3 parts: Personal information form, IWB scale form, and WSC scale form.

Personal Information Form: It consists of questions to determine the characteristics such as age, gender, city of residence, education level, and professional experience of the IT sector employees participating in the research.

IWB Scale: The original scale used to measure IWB was developed by Janssen, (2000). The adaptation study of the scale into Turkish was made by Töre (2017), and it was composed of 9 items and 3 sub-dimensions: idea generation, idea promotion, and idea realization. There are 3 items in each sub-dimension. The reliability of the IWB scale is 0.87 (Hair et al., 2010).

WSC Scale: The scale was developed by Howard, Farr, Alicia, and Gutworth (2017). The Turkish adaptation of the scale was made by Uysal and Bayramoğlu (2022). The scale consists of 9 items and one dimension. The reliability of the WSC scale is 0.85. Scale items were prepared in a five-point Likert type. Items of the scale; It is scored as Never (1), Rarely (2), Sometimes (3), Often (4), and Always (5).

3.4. Data Analysis

Before performing the analyzes on the data obtained within the scope of the research, the normality tests and reliability analyzes of the data were carried out by using the SPSS program to check the validity of the data and whether they were normally distributed. As a result of the analysis, Skewness, and Kurtosis values were $-.537$ and $.616$ for the IWB scale; $-.395$ and $.501$ for idea generation, one of the sub-dimensions of the scale; -1.232 and 1.289 for idea promotion; $-.435$ and $-.025$ for idea realization; it was found to be $-.117$ and $-.411$ for the WSC Scale. Since Kurtosis and Skewness values were found to be between -1.5 and $+1.5$, it was accepted that the data showed a normal distribution (Tabachnick & Fidell, 2013). In addition, Cronbach's Alpha values were checked for the validity of the scales and the IWB scale was $\alpha=.889$; idea generation from the sub-dimensions of the scale $\alpha=.751$; idea promotion $\alpha=.825$; it was concluded that idea realization $\alpha=.829$ and WSC Scale $\alpha=.859$ and the scales were at a reliable level.

For the factor analysis of the IWB Scale, the Kaiser Meyer-Olkin (KMO) value and the Bartlett test values were checked to evaluate the suitability of the data set for factor analysis. The KMO coefficient of the scale was $.867$; The result of Bartlett sphericity test was found as Chi-Square=946.040, $df = 36$, sig. $.000$ ($p < .001$). The results obtained show that the data set is suitable for factor analysis.

As can be seen in Table 1 as a result of the exploratory factor analysis (EFA) conducted for the IWB scale, unlike the original scale, it was collected in two dimensions. The total variance explained by this two-factor structure is 57.36%. The reliability value of the IWB Scale, which consists of two factors and 9 statements, is 0,889; the Idea generation&realization sub-dimension is 0,867; The idea promotion dimension is 0,825.

Table 1: EFA Results of the IWB Scale

Factor/Item	Factor Load	Explained Variance
Idea Generation&Realization ($\alpha=,867$)		48,134
fu_5	,927	
fu_4	,771	
fu_3	,723	
fu_1	,615	
fu_6	,583	
fu_2	,576	
Idea Promotion ($\alpha=,825$)		9,230
fd_2	,967	
fd_1	,748	
fd_3	,486	

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 5 iterations.

After determining the factor structure displayed in Table 1, the structural equation model and CFA were applied using the AMOS24 program to analyze the construct validity of the Innovative Business Behavior Scale, which consists of two factors and 9 statements, on the factor structure in question. As a result of the CFA performed, the model fit indices were seen as χ^2 / df (CMIN/DF)= 3,342; RMSEA = ,106; GFI =,920; NFI = ,910; RFI = ,875; AGFI=,862; CFI =,934. Modification indices suggested error covariance between expressions e4 and e6 (MI=23,626), e4 and e5 (MI=14.416). After combining the error variances of the mentioned items for the goodness of fit values in line with the modification indices suggestions, confirmatory factor analysis was performed again and the model fit indices were χ^2 / df (CMIN/DF)= 1.895; RMSEA = .066; GFI = .956; NFI = .953; RFI = .929; CFI = .977 values revealed that the two-factor model showed a perfect fit (Bentler, 1990; Browne & Cudeck, 1993). In addition, idea_promotion, the sub-dimension of the Innovative Business Behavior Scale is AVE=,636; CR=,837; idea_generation&realization is AVE=,508; CR=,825. The CFA results of the Innovative Business Behavior scale are shown in Figure 1.

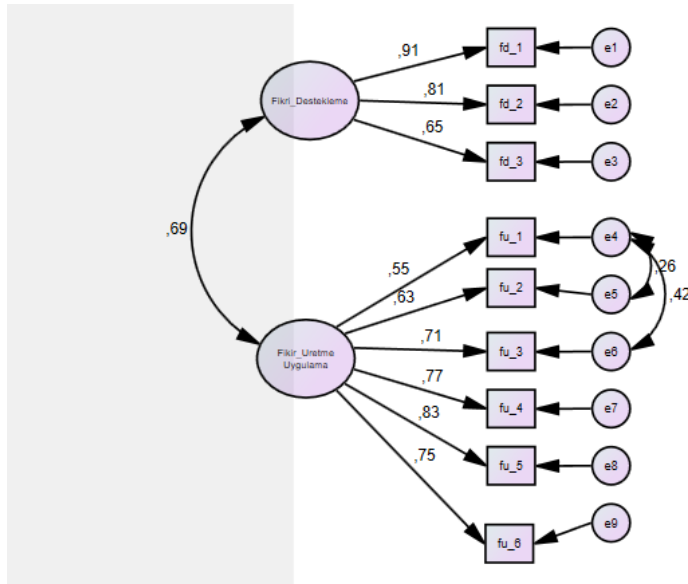


Figure 1: CFA Analysis Results of IWB Scale

In the study, for factor analysis for WSC Scale, Kaiser Meyer-Olkin (KMO) value and Bartlett test values were checked to evaluate the suitability of the data set for factor analysis. The KMO coefficient value of the scale was ,875; The result of the Barlett sphericity test was found as Chi-Square=690,379, $df = 36$, sig. .000 ($p < .001$). The results obtained show that the data set is suitable for factor analysis.

As can be seen in Table 2, as a result of the exploratory factor analysis (EFA) conducted for the WSC scale, it was collected in one dimension following the original scale, and the total variance explained by this single factor structure was 42,085%, and the reliability value was ,859.

Table 2: EFA Results of the WSC Scale

	Factor Load	Explained Variance
WSC ($\alpha = ,859$)		42,085
isc_5	,777	
isc_6	,744	
isc_9	,717	
isc_7	,677	
isc_1	,628	
isc_4	,618	
isc_3	,550	
isc_2	,549	
isc_8	,528	

Extraction Method: Maximum Likelihood.
Rotation Method: Oblimin with Kaiser Normalization.
a. 1 factor extracted. 4 iterations required.

After determining the factor structure displayed in Table 2, the structural equation model and CFA were applied using the AMOS24 program to analyze the construct validity of the WSC Scale, which consists of 9 single-factor statements, on the factor structure in question.

As a result of the CFA, model fit indices were χ^2 / df (CMIN/DF)= 3.007; RMSEA = .098; GFI =.921; NFI = .885; RFI = .846; AGFI=0.869; CFI = 0.919. The modification indices suggested error covariance between the items e3 and e4 (MI=11.083), e3 and e7 (MI=10.043), e4 and e6 (MI=8.183). After combining the error variances of the mentioned items for the goodness of fit values in line with the modification indices suggestions, confirmatory factor analysis was performed again and the model fit indices were χ^2 / df (CMIN/DF)= 2.244; RMSEA = .077; GFI = .951; NFI = .923; RFI = .885; CFI = .955 values revealed that the single factor model showed good fit (Bentler, 1990; Browne & Cudeck, 1993). In addition, AVE=.415 on the WSCScale; CR=.862. The CFA results of the WSCscale are shown in Figure 2.

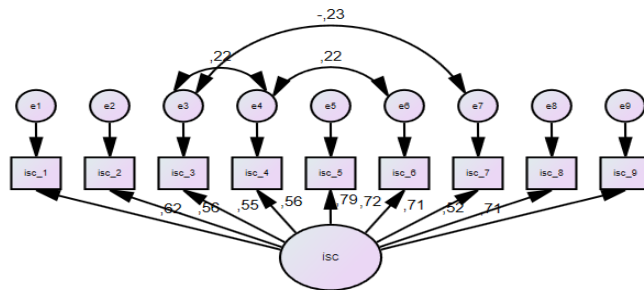


Figure 2: CFA Results of the WSC Scale

4. Findings

After the normality, validity, and reliability analyses of the scales, descriptive information about the demographic characteristics of the participants was included in this part of the study.

Table 3: Demographic Characteristics of Participants (n=209)

Variables		n	%		n	%	
Gender	Female	78	37,3	City	İstanbul	118	56,5
	Male	131	62,7		Ankara	27	12,9
Age	≤ 22 yaş	4	1,9		İzmir	8	3,8
	23-41 yaş	172	82,3		Bursa	13	6,2
	42-57	33	15,8		Antalya	16	7,7
Organization	Public	10	4,8		Diğer	27	12,9
	Private	199	95,2		High school	3	1,4
Working Period	1-5 year	80	38,3		Education	Associate degree	28
	6-10 year	55	26,3	License		132	63,2
	11-15 year	35	16,7	Degree		43	20,6
	16-20 year	25	12,0	Doctorate		3	1,4
	≥ 21 year	14	6,7				

As can be seen in Table 3, 95.2% of the participants are private sector employees, 62.7% are men, 37.3% are women, 63% are undergraduate graduates, and 82.3% are aged 23-41. Among these, 38.3% have 1-5 years of professional experience, and 56.5% work in Istanbul.

The descriptive statistics of the scales are given in Table 4. As can be seen in Table 4, it is seen that the IWB levels of the participants are quite high (4.29), while the levels of WSC are high (3.88).

Table 4: Descriptive Statistics of Scales (n=209)

	Min	Max	Mean	Std. Error	S. D.	Variance
IWB	2,44	5,00	4,2865	,03533	,51074	,261
WSC	1,78	5,00	3,8852	,04645	,67158	,451

The SPSS21 program was used to test the hypotheses of the study. Correlation analysis was performed to examine the relationship between the variables.

Table 5: Correlation Results of IWB and WSC

		1	2	3	4
IWB	Pearson Correlation	1			
	Sig.				
Idea promotion	Pearson Correlation	,802**	1		
	Sig.	,000			
Idea generation&realization	Pearson Correlation	,965**	,618**	1	
	Sig.	,000	,000		
WSC	Pearson Correlation	,563**	,450**	,543**	1
	Sig.	,000	,000	,000	

***. Correlation is significant at the 0.01 level (2-tailed).*

As a result of the correlation analysis (can be seen in Table 5), it was found that the relationship between WSC and IWB of employees ($r=.563$; $p=.000$) was a significant and positive moderate relationship and that WSC was associated with all dimensions of IWB ($r_{\text{idea_promotion}}=.450$; $p=.000$; $r_{\text{idea_generation\&realization}}=.543$; $p=.000$) was found to be significantly, positively and moderately correlated. It was seen that the social courage of the employees was related to their IWB levels and the $H_{3a,3b, \text{ and } 3c}$ hypotheses were accepted in line with these findings.

Regression analysis was conducted to test the level of influence of WSC on the IWB of employees. As seen in Table 6, WSC explains approximately 32% of the variance of IWB. It is seen that every 1 unit increase in WSC will bring an increase of 428 in IWB.

$IWB = 2,624 + 0,428 * WSC$ A regression model has been formulated as.

Table 6: The Effect of WSC on IWB

Model	R	R ²	Adjusted R ²	Std. Error		
1	,563 ^a	,316	,313	,42328		
ANOVA ^b						
Model	Sum of Square	df	Mean Square	F	Sig.	
Regression	17,172	1	17,172	95,846	,000 ^b	
Residual	37,087	207	,179			
Total	54,259	208				
Coefficients ^b						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	β	Std. E.	β			
1	Constant	2,624	,172		15,232	,030
	WSC	,428	,044	,563	9,790	,000

a. Dependent Variable: IWB

According to the results of the regression analysis carried out to test the level of the effect of WSC on idea promotion, one of the sub-dimensions of IWB of employees, it is seen that WSC explains approximately 20% of the variance of the idea promotion dimension. As can be seen in Table 7, it is seen that every 1 unit increase in WSC will bring along an increase of 0,341 in the dimension of intellectual support.

Idea promotion dimension = $3.274 + 0.341 * WSC$ a regression model was formulated as.

Table 7: The Effect of WSC on Idea Promotion

Model	R	R ²	Adjusted R ²	Std. Error	
1	,450 ^a	,203	,199	,45588	
ANOVA ^b					

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	10,930	1	10,930	52,593	,000 ^b
Residual	43,021	207	,208		
Total	53,951	208			

Coefficients ^b					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. E.	β		
1	Constant	3,274	,186		
	WSC	,341	,047	,450	,000

a. Dependent Variable: Idea Promotion

According to the results of the regression analysis conducted to test the level of the effect of WSC on idea generation & realization, one of the sub-dimensions of IWB of employees, it is seen that WSC explains approximately 30% of the variance of the idea generation & realization dimension.

As can be seen in Table 8, it is seen that every 1 (one) unit increase in WSC will bring an increase of 0,471 in the dimension of idea generation & realization. It is seen that the social courage of the employees is effective in generating and realizing new ideas.

Idea generation & implementation dimension = $2,300 + 0,471 * WSC$ a regression model was formulated as.

An independent sample t-test was conducted to analyze the differences in the IWB levels of the employees by gender. According to the results of the analysis, it was concluded that the IWB levels of the employees ($p=0.743 > 0.05$) did not differ according to gender. Eröz and Şittak (2019: 1574) concluded in their study that there is no significant difference between IWB and gender variables. The findings are in line with the literature.

Table 8: The Effect of WSC on Idea Generation&Realization

Model	R	R ²	Adjusted R ²	Std. Error
1	,543 ^a	,295	,292	,48989

ANOVA ^b					
Model	Sum of Square	df	Mean Square	F	Sig.
Regression	20,819	1	20,819	86,751	,000 ^b
Residual	49,677	207	,240		
Toplam	70,497	208			

Coefficients ^b					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. E.	β		

1	Constant	2,300	,199		11,533	,000
	WSC	,471	,051	,543	9,314	,000

a. Dependent Variable: Idea generation&realization

A One-Way ANOVA test was conducted to analyze the difference between the IWB levels of the employees according to their professional experience. According to the results of the analysis, it was concluded that the IWB levels of the employees ($p=0.988 >0.05$) did not differ according to their professional experience. Eröz and Şittak (2019) state that IWB differs according to the working hours of the employees. $H_{1a,1b}$ hypotheses were rejected within the scope of the findings.

An independent sample t-test was conducted to analyze the differences in WSC of employees by gender. According to the results of the analysis, it was concluded that the WSC of the employees ($p=0.259 >0.05$) did not differ according to gender.

Koksal et al. (2022: 29) concluded in their study that men exhibit higher WSC than women. While gender expresses a physiological feature, it refers to culturally defined social and psychological phenomena when considered socially. This feature, which we can express as social gender, accepts that people will behave in different ways according to their gender. What is generally accepted among cultures is that women assume a role that is more gentle, affectionate, sympathetic, and respectful to the needs of other individuals than men, and this situation seems to suggest that they may exhibit less courageous behaviors compared to men and that men will be more courageous (Howard & Fox, 2020:3). In the study, different findings were obtained from the literature. According to the characteristics attributed to women and men within the scope of gender, it may be an indication that courage is not unique to men. On the other hand, since it is possible that the unequal distribution of the participants according to the gender variable can be shown as a reason for not detecting the difference, it can be thought that the subject will become clearer in future studies to determine whether gender affects workplace social courage.

One-Way ANOVA test was conducted to analyze the difference in WSC of employees according to their professional experience. According to the results of the analysis, it was concluded that the levels of WSC of the employees ($p=0.159 >0.05$) did not differ according to their professional experience. $H_{2a \text{ and } 2b}$ hypotheses were rejected within the scope of the findings.

5. Discussion and Conclusion

Organizational employees can exhibit WSC behavior in their business life to contribute to their organizations and to reach their individual goals. In adapting to changing environmental conditions, organizations need to have and retain employees who will make a difference in their business processes, who are innovative and who have high social courage, attract the attention of the potential workforce, and make them current employees. It is obvious that employees with a high level of social courage in the workplace will develop more creative works, and will anticipate and implement new opportunities to keep up with the change and contribute to it by using the initiative. In the

study, an answer was sought to the question of whether WSC is effective in the IWB of the IT sector employees, where development and change are experienced rapidly and it is even more important to keep up with this change. As can be seen from the findings, it is seen that the social courage and IWB levels of the IT sector employees are high. In addition, it was concluded that WSC positively affects IWB levels, and employees with high social courage exhibit more IWB. In the literature, direct studies on the relationship between WSC and IWB have not been found yet. Despite this, there are studies on social courage behavior that have positive reflections on the organizational climate. It is stated in the literature that individuals who exhibit WSC tend to create a positive organizational climate, display courageous behavior and show high job performance. In this case, it can be said that the findings support the results of similar studies in the literature. Koerner (2014) revealed in his study that employees who show social courage in the workplace help reduce social identity mismatches. Kanten et al., (2022) found significant relationships between social courage behavior in the workplace and prosocial vocalizing behavior in their research. Koksall et al. (2022) concluded in their study that men exhibit higher WSC than women. It has been concluded that the increase in the level of social courage behavior in the workplace also increases prosocial behavior. Magnano et al., (2022), in their study investigating the mediating role of social courage in the relationship between risk intelligence, courage, and job performance; shows the effect of subjective risk intelligence and courage. In addition to these studies, some research in the literature that include some organizational elements that support IWB can be mentioned. Çalışkan (2013) found positive significant relationships between organizational culture and IWB in his study. Akkoç (2011) states in his research that the understanding of leadership and organizational culture together supports innovative business behavior. Again, Çalışkan & Akkoç (2012) revealed that IWB increases organizational performance as a result of their research on informatics workers. Holman et al., (2012) found positive and significant relationships between job design in organizational structure and IWB. Sözbilir (2018) concluded in his research that professional competence and self-efficacy have a positive effect on the innovative behavior of the employee. In his research, Ayas (2015) revealed that the IWBs of the IT sector employees are related to intellectual capital and concluded that this relationship also affects organizational performance. İmamoğlu (2019) stated that the IWB of IT sector employees is related to organizational support and knowledge sharing; revealing that empowering leadership assumes a full mediator role in this relationship. Özcan (2021), in his research, determined that there is a significant and high-level relationship between IWB and the metacognitive skills of IT sector employees. Likewise, Ogan (2021) found in his research that adapting the workplace design according to the employees reveals creative ideas in the workplace. Biçer (2021) found significant and positive relationships between IWB and employee empowerment. In his research, Ogan (2022) determined that the innovation management ability of leaders increases employee loyalty in the organization. It has been revealed that organizational cultural structure, innovation strategy, and project management and commitment are interrelated. Amabile et al. (1996) stated that the work environment encourages innovation. In the research, it has been determined that there are relationships between innovative behavior in encouraging and liberal work environments.

In the study, it was also examined whether the levels of WSC and IWB differ according to the demographic characteristics of the employees. From demographic characteristics; because the data related to the variables of the institution he/she works for, the level of education, and the province he/she works in do not show an equal distribution, the analyzes were not carried out. Differences between demographic variables in terms of gender and professional experience were tested and it was concluded that these demographic variables did not differ on the levels of WSC and IWB of the employees. Akgül & Yavuz (2019) revealed that the IWB of IT sector employees differed according to gender and field of expertise, and the said difference was in favor of men. This difference is mostly in favor of the software field; stated that it emerged at least in favor of the database area. In his research, Töre (2019) determined that the IWBs of the IT sector employees did not change in terms of demographic variables. As can be seen, different results can be obtained in terms of demographics on the subject.

The fact that the findings obtained cannot be generalized to other fields is one of the limitations of the study since the study was carried out only on IT sector employees. In addition, since there are no similar studies in the literature containing research variables in the informatics sector or other sectors, the deficiencies in the comparison of the findings can be considered as another limitation. In future studies, the generalizability of the findings can be ensured by conducting research in different sectors regarding the effect on WSC and IWB. In addition, it is recommended to carry out studies to determine the antecedents of WSC behavior, which is a new topic in the literature, by including it in the analysis process.

Author Contribution

CONTRIBUTION RATE	EXPLANATION	CONTRIBUTORS
Idea or Notion	From the research idea or hypothesis	Nurcan ÇETİNER Ela OĞAN
Literature Review	Review the literature required for the study	Nurcan ÇETİNER Ela OĞAN
Research Design	Designin method, scale, and pattern for the study	Nurcan ÇETİNER Ela OĞAN
Data Collection and Processing	Collecting, organizing, and reporting data	Nurcan ÇETİNER Ela OĞAN
Discussion and Interpretation	Talking responsibility in evaluating and finalizing the findings	Nurcan ÇETİNER Ela OĞAN

Conflict of Interest

The authors declared no potential conflicts of interest.

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References

- Adair, J. (2008). Yenilikçi liderlik. İstanbul: Babıalı Kültür Yayıncılığı.
- Akgül, İ. (2019). Bilgi paylaşımının çalışan yaratıcılığı ve yenilik yapma davranışı üzerindeki etkisinde algılanan örgütsel desteğin aracı rolü: Bilişim teknolojileri çalışanları üzerine bir araştırma. [Doktora Tezi]. Erzincan Binali Yıldırım Üniversitesi, Sosyal Bilimler Enstitüsü.
- Akgül, İ. & Yavuz, U. (2019). BT çalışanlarının yenilikçi davranışlarının demografik özellikler açısından incelenmesi. *Erzincan Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 12(1), 54-72.
- Akkoç, İ., Turunç, Ö. & Çalışkan, A. (2011). Gelişim kültürü ve lider desteğinin yenilikçi davranış ve iş performansına etkisi: iş-aile çatışmasının aracılık rolü: sağlık sektöründe bir araştırma. *"İşGüç" Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 13(4), 83-114.
- Aksu, G., Eser, M. T. & Güzeller, C. O. (2017), Açımlayıcı ve doğrulayıcı faktör analizi ile yapısal eşitlik uygulamaları. Ankara: Detay Yayıncılık.
- Angadi, A.B. & Naik, D.M. (2011). Impact of employee's behavior and culture on organizations productivity in pharmaceutical industries of Bangaluru. *Science and Technology*, 3(7), 55-57.
- Ayas, S. (2015). Entelektüel sermaye ve yenilikçi iş davranışının işletme performansına etkisi: Bilişim sektöründe bir uygulama. *Çanakkale Onsekiz Mart Üniversitesi Sosyal Bilimler Enstitüsü*.
- Barker, A. (2002). Yenilikçiliğin simyası, Çev: Ahmet Kardam, İstanbul: MESS Yayınları.
- Biçer, M. (2021). Lider-üye etkileşimi ve yenilikçi davranış ilişkisinde personel güçlendirmenin aracılık etkisi, *İşletme Araştırmaları Dergisi*, 13(1), 330-342.
- BThaber, (2021). Bilişim500plus, ilk beş yüz bilişim şirketi, bilişim şirketi Türkiye 2021 bilişim pazarının gelişimi, eğilimler ve beklentiler, Retrieved from, <https://bthaber.com/b500pdf/B5002021DIJITAL.pdf> (04.01.2023).
- Büyükoztürk, Ş. (2002). Faktör analizi: temel kavramlar ve ölçek geliştirmede kullanımı, *Kuram ve Uygulamada Eğitim Yönetimi*, 32, 470-433.
- Carmeli, A., Sheaffer, Z., Binyamin, G., Reiter-Palmon, R. & Shimoni, T. (2014). Transformational leadership and creative problem-solving: the mediating role of psychological safety and reflexivity. *J. Creat. Behav.* 48, 115–135.
- Çalışkan, A. (2013). İç odaklı örgüt kültürünün yenilikçi davranışa etkisinde personel güçlendirmenin aracılık rolü. *Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 15(1), 88-112.
- Çalışkan, A., & Akkoç, İ. (2012). Girişimci ve yenilikçi davranışın iş performansına etkisinde çevresel belirsizliğin rolü. *Çağ Üniversitesi Sosyal Bilimler Dergisi*, 9(1), 1-28.
- Çevik Tekin, İ., & Akgemci, T. (2019). Psikolojik güçlendirmenin yenilikçi iş davranışına etkisi. *İşletme Araştırmaları Dergisi*, 11(3), 1674-1692.
- Damanpour, F., & Wischnevsky, J. D. (2006). Research on innovation in organizations: Distinguishing innovation-generating from innovation-adopting organizations, *Journal of Eng. Technology Management*, 23, 269–291.
- De Jong, J. & Kemp. R. (2003). Determinants of co-workers' innovative behaviour: an investigation into knowledge intensive services. *International Journal of Innovation Management*, 7(2), 189-212.
- De Jong, J. P. J. (2014). Individual innovation: the connection between leadership and employees' innovative work behavior, University of Amsterdam, 2007, <http://dare.uva.nl/document/2/52860> (27.01.2023).
- Detert, J. R. & Bruno, E. A. (2017). Workplace courage: review, synthesis, and future agenda for a complex construct. *Academy of Management Annals*, 11(2), 593-639. <https://doi.org/10.5465/annals.2015.0155>.
- Drucker, P. (1998). The discipline of innovation, *Executive Forum Summer 1998*, 13-15.

- Dyer, J., Gregersen, H. & Christensen, C. (2011). *The Innovator's DNA: Mastering the five skills of disruptive innovators*, Harvard Business Press Boston MA USA.
- Erdem, A. T. (2021). Güçlendirici liderliğin yenilikçi iş davranışına etkisinde bilgi paylaşımının aracılık rolü: bilişim sektöründe bir araştırma. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 30(1), 119-131.
- Ginevra, M. C., Santilli, S., Camussi, E., Magnano, P., Capozza, D., & Nota, L. (2020). The Italian adaptation of courage measure. *International Journal for Educational and Vocational Guidance*, 20(20), 457-475.
- Heinze, K. L., & Heinze, J. E. (2018). *Individual innovation adoption and the role of organizational Culture*. Review of Managerial Science: Springer.
- Holman, D., Totterdell, P., Axtell, C., Stride, C., Port, R., Svensson, R. & Zibarras, L. (2012). Job design and the employee innovation process: the mediating role of learning strategies. *Journal of Business and Psychology*, 27(2), 177-191.
- Howard, M. C. & Fox, F. R. (2020). Does gender have a significant relationship with social courage? Test of dual sequentially mediated pathways. *Personality and Individual Differences*, 159, 109904. <https://doi.org/10.1016/j.paid.2020.109904>.
- Howard, M. C., & Holmes, P. E. (2019). Social courage fosters both voice and silence in the workplace: a study on multidimensional voice and silence with boundary conditions. *Journal of Organizational Effectiveness: People and Performance*, 7(1), 53-73.
- Howard, M. C., Farr, J. L., Grandey, A. A. & Gutworth, M. B. (2017). The creation of the workplace social courage scale (WSCS): An investigation of internal consistency, psychometric properties, validity, and utility. *Journal of Business and Psychology*, 32, 673-690. <https://doi.org/10.1007/s10869.016.9463-8>.
- İmamoğlu, E. B., & Turan, A. D. (2019). Güçlendirici liderliğin bilgi paylaşımı davranışı üzerindeki etkisinde algılanan örgütsel destek davranışının aracı rolü: bilişim sektöründe bir araştırma. *Istanbul Management Journal*, (87), 27-48.
- İraz, R., (2005). *Yaratıcılık ve yenilik bağlamında girişimcilik ve kobi'ler*, Konya: Çizgi Yayınevi.
- Jafri, M. H. (2010). Organizational commitment and employee's innovative behavior: A study in retail sector. *Journal of Management Research*, 10(1), 62.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness, and innovative work behavior. *Journal of Occupational and Organizational Psychology*, 73, 287-302.
- Kanter, P., Pazarcık, Y., Durmaz, M.G. & Arda, B. (2022). İşyerinde sosyal cesaretin prososyal ses çıkarma davranışı üzerindeki etkisinde proaktif kişiliğin aracılık rolünün belirlenmesi, *İşletme Araştırmaları Dergisi*, 14(4), 2867-2877.
- Kanter, R. (1988). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, 10, 169-211, Greenwich, CT: JAI Press.
- Kilmann, R. H., O'Hara, L. A. & Strauss, J.P. (2010). Developing and validating a quantitative measure of organizational courage. *Journal of Business and Psychology*, 25, 15-23, <https://doi.org/10.1007/s10869.009.9125-1>.
- Klein, M., & Napier, R. (2003). *The Courage to Act: 5 Factors of Courage to Transform Business*. Palo Alto, CA: Davies - Black Publishing.
- Koerner, M. M. (2014). Courage as identity work: accounts of workplace courage. *Academy of Management Journal*, 57(1), 63-93. <https://doi.org/10.5465/amj.2010.0641>.
- Köksal, K., Mert, İ. S. & Gürsoy, A. (2022). İşyeri sosyal cesareti ile örgütsel adalet ilişkisi: cinsiyete göre çoklu grup analizi, *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 13(30), 29-41. <https://doi.org/10.21076/vizyoner.1136016>.

- Kramer, A., & Zinbarg, R. (2019). Recalling courage: An initial test of a brief writing intervention to activate a 'courageous mindset' and courageous behavior. *The Journal of Positive Psychology*, 14(4), 528-537.
- Li, X., & Zheng, Y. (2014). The influential factors of employees' innovative behavior and the management advices. *Journal of Service Science and Management*, 7, 446-450.
- Lopez, S. J. (2007). Profiling courage: introduction to the special issue on courage. *The Journal of Positive Psychology*, 2(2), 79.
- Maddi, S. R. (2006). Hardiness: the courage to grow from stresses. *Journal of Positive Psychology*, (1), 160-168.
- Magnano, P., Santisi, G., Zammitti, A., Zarbo, R., Scuderi, V. E., Valenti, G. D. & Faraci, P. (2022). The relationship between subjective risk intelligence and courage with working performance: the potential mediating effect of workplace social courage. *European Journal of Investigation in Health, Psychology and Education*, 12(4), 431-444.
- Mert, I. S., Sen, C. & Alzghoul, A. (2021). Organizational justice, life satisfaction, and happiness: the mediating role of workplace social courage. *Kybernetes*, 51(7), 2215-2232.
- Mert, I. S., Sen, C. & Arun, K. (2021). İş yeri sosyal cesaretinin bir öncülü olarak kişilerarası/ilişkisel güç. 30.Ulusal Yönetim ve Organizasyon Kongresi. Isparta, Türkiye.
- Mert, İ. S. (2021). Cesaret ve bileşenlerinin keşfine ilişkin nitel bir araştırma: eski bir erdemden yeniden keşfi. *İş ve İnsan Dergisi*, 8(1), 19-31.
- Mert, İ. S. & Aydemir, M. (2019). Yönetimsel cesaretin tarihi kaynakları üzerine bir inceleme: eski Türk yazıtlarında cesaret. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 7(6), 331-340.
- Mogee, M. E. & Schacht, W. H. (1980). Industrial innovation: major issues system. *Issue brief*, (1B80005).
- Obeso, M., Luengo M. J. & Intxausti M. A. (2013). Managing intellectual capital in the information and communication industry: the spanish case", (edi:Lidia Garcia, Arturo Rodrigues-Castellanos and Jon Barrutia-Guenaga) *Proceeding of The 5th European Conference on Intellectual Capital*, University of The Basque Country, 581-589, Bilbao.
- Oğan, E. (2022). Yenilik yönetimi yeterlikleri ile örgütsel bağlılık arasındaki ilişki: öğretmenler üzerine bir araştırma, *Sosyal, Beşeri ve İdari Bilimler Dergisi*, 5(11): 1583-1602.
- Oğan, Y. (2021). Mutfak çalışanlarının yaratıcılık algı düzeyleri üzerine bir araştırma. *Fiscaoeconomia*, 5(2), 756-768. doi: 10.25295/fsecon.891984.
- Oslo Kılavuzu, (2005). Yenilik Verilerinin Toplanması ve Uygulanması İçin İlkeler.
- Özbezek, B. D. (2021). Psikolojik sermayenin yenilikçi davranış üzerindeki etkisinde psikolojik güvenliğin aracılık rolü. *Yaşar Üniversitesi E-Dergisi*, 16(64), 1720-1740.
- Özcan, U. (2021). The relationship between metacognitive skills and innovative work behaviours of information communication technologies sector employees. [Master Thesis]. Yeditepe University Graduate School of Educational Sciences Directorate.
- Palmer, D., & Kaplan, S. (2007). A Framework for Strategic Innovation: Blending strategy and creative exploration to discover future business opportunities. Retrieved May, 15, 2009. <https://www.peterfisk.com/wp-content/uploads/2016/02/Strategic-Innovation-White-Paper.pdf>
- Rate, C. R., Clarke, J. A., Lindsay, D. R. & Sternberg, R. J. (2007). Implicit theories of courage, *The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice*, 2(2), 80-98, <http://dx.doi.org/10.1080/174.397.6070122875>.
- Shayah, M.H. & Zehou, S. (2019). Organizational culture and innovation: A literature review. *Advances in Social Science, Education and Humanities Research*, 344, 465-472.
- Sözbilir, F. (2018). İşbaşı eğitim uygulamaları, öz-yeterlilik ve yenilikçilik davranışı arasındaki ilişki. *İşletme Araştırmaları Dergisi*, 10(1), 119-142.

- Şenol, L. (2022). Örgüt kültürü, çalışan davranışı ve yenilikçi davranış ilişkisi üzerine bir araştırma. *JOEEP: Journal of Emerging Economies and Policy*, 7(1), 149-159.
- Tabachnick, B. G. & Fidell, L. S. (2013). *Using Multivariate Statistics*, Boston: Pearson.
- TDK (2022). Türkçe sözlük. <https://sozluk.gov.tr/>. Erişim Tarihi: 20.12.2022.
- Töre, E. (2017). Yenilikçi davranış ölçeği: entelektüel sermayenin yenilikçi iş davranışına etkisinin bilgi paylaşımı, öz yeterlilik ve iç denetim odağı perspektifinden incelenmesi üzerine bir araştırma. [Doktora Tezi]. İstanbul: İstanbul Üniversitesi.
- Töre, E. (2019). Entelektüel sermayenin yenilikçi iş davranışına etkisinde bilgi paylaşımının aracı rolü, *Yönetim Bilimleri Dergisi*, 17(34), 275-299.
- TUİK, (2022). Ücretli çalışan istatistikleri, Kasım 2022, <https://data.tuik.gov.tr/Bulten/Index?p=Ucretli-Calisan-Istatistikleri-Kasim-2022-49358>.
- Uysal, E. & Bayramoğlu, G. (2022). İşyerinde sosyal cesaret davranışı ölçeğinin Türkçe'ye uyarlama çalışması, *İşletme Araştırmaları Dergisi*, 14(1), 54-71. <https://doi.org/10.20491/isarder.2022.1366>.
- Wang, Y. L. (2013). R & D Employees' innovative behaviors in Taiwan: hrm and managerial coaching as moderators, *Asia Pasific Joarnal of Human Resources*, 51, 491-515.
- West, M. A. & Farr, J. L. (1989). Innovation at work: psychological perspectives, *Social Behaviour*, 4(1), 15-30.
- Youn, F. & Marquard, D.J. (2021). Innovative behavior. Retrieved from <https://www.oxfordbibliographies.com/view/document/obo-978.019.9846740/obo-978.019.9846740-0054.xml>.

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