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Araştırma Makalesi / Research Article Adaptation of the Organizational Mindfulness Scale into Turkish

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Abstract

This study aims to introduce the scale of organizational mindfulness to Turkish literature which was developed by Vogus and Sutcliffe (2007, 2012) and adapted to organizational mindfulness literature from Highly Reliable Organizations Theory by Weick and Sutcliffe (2015). In this context, validity and reliability analyzes were performed. After the translation of the related scale into Turkish, the suitability of language and content was evaluated according to expert opinions. The survey was applied to 738 people and the internal consistency coefficient of the scale was found to be 0.926. As a result of the analysis, it is seen that the scale adapted to Turkish validates the single factor structure of organizational mindfulness scale. This scale shows the feature of being the shortest way with its five-principle mechanism in measuring the basic efficiency of enterprises. Also, the scale provides a roadmap for organizational development in all environmental conditions such as uncertainty and competition.

Keywords: High Reliability Organizations (HROs), Organizational Mindfulness, Scale Adaptation.

Örgütsel Farkındalık Ölçeğini Türkçeye Uyarlama Çalışması

Öz

Bu çalışma, Vogus and Sutcliffe (2007, 2012) tarafından geliştirilen ve Weick and Sutcliffe (2015) tarafından güvenilirliği Yüksek Örgütler Teorisi'nden örgütsel farkındalık alanyazınına uyarlanan Örgütsel Farkındalık Ölçeği'ni Türkçe alanyazına tanıtmayı amaçlamaktadır. Bu bağlamda geçerlilik ve güvenilirlik analizleri yapılmıştır. İlgili ölçeğin Türkçeye çevrilmesinin ardından dil ve içerik uygunluğu uzman görüşlerine göre değerlendirilmiştir. Araştırma 738 katılımcıya uygulanmış ve ölçeğin iç tutarlılık katsayısı 0,926 olarak saptanmıştır. Analiz sonucuna göre Türkçeye uyarlanan ölçeğin, Örgütsel Farkındalık Ölçeği'nin tek faktörlü yapısını doğruladığı görülmektedir. Bu ölçek, işletmelerin temel etkinliğini ölçmede beş prensipli mekanizması ile en kısa yol olma özelliğini göstermektedir. Ayrıca ölçek, belirsizlik ve rekabet gibi tüm çevresel koşullarda organizasyonel gelişim için bir yol haritası sunmaktadır. Anahtar Kelimeler: Güvenilirliği Yüksek Örgütler (GYÖ), Örgütsel Farkındalık, Ölçek Uyarlama.

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1. INTRODUCTION

The concept of mindfulness has a long history with its exercises practiced for centuries. However, mindfulness practices in businesses have become popular in recent years. For this reason, understanding of organizational mindfulness' thinking structures and practices that can be adapted for businesses and developing new organizational behaviors has become very important. In the literature, it is seen that the concept of organizational mindfulness emerged in the light of High Reliability Organizations (HRO) studies. First studies about HROs emerged with the 1980s. The aim of the study is to determine the common characteristics of the enterprises which are less affected by adverse events even though they operate in dangerous conditions (Weick and Sutcliffe 2001). At the same time, according to Langer (1993), mindfulness also facilitates problem solving and creativity when faced with a dilemma. Weick and Sutcliffe (2007) also examined successful HROs based on the Langer approach and observed that mindfulness characteristics in individuals could be transformed into specific organizational behaviors. As with individuals, organizations that adopt a mindfulness-based approach in their daily activities can anticipate potential problems and gain the ability to return and cope with difficulties when challenges arise. During their research, Weick and Sutcliffe focused on organizations such as hospital emergency services, aircraft carriers, fire departments, nuclear power plants and NASA. These institutions are capable of overcoming problems that could potentially lead to catastrophic consequences (Pirson et al., 2012: 5). The most important reason is that organizations should be vigilant against even the smallest inconsistency. Because a small problem in these organizations' structure can quickly lead to a big problem. Therefore, quick action is needed to solve the problem and regain balance (Weick and Sutcliffe, 2007). Weick and Sutcliffe (2001: 114), asserts that non-HROs have a lot to learn from a HROs. On the other hand, Weick and Sutcliffe (2001) state that today's business conditions include increased competition, higher customer expectations, reduced cycle time and close commitment. These changes create harsh, risky and unforgivable environments almost as same as HROs. In this case, organizations faced similar processes with HRO. The risk climate in organizations increases with the participation of unit employees and the initiative of the units. On the other hand, the perceived risk environment is used to noticeably eliminate unexpected loses (Sheedy et al., 2017). For this reason, organizations need to develop their learning and adaptation skills. This process increases the need for mindfulness in organizations.

In the light of all these evaluations, as understood from the literature, organizational mindfulness concept is based on mindfulness of self (Hoy et al., 2004: 306-307). In particular, Langer's descriptions of mindfulness have been widely accepted by organizational researchers (Fiol & O'Connor 2003; Weick et al. 1999). Langer's definition of mindfulness is expressed by Weick et al. (1999:37) as "rich awareness" with its components of creating new categories, having multiple perspectives, being open and willing to innovation. Although the concept of mindfulness is primarily examined in an individual structure, it is known that collective mindfulness includes more than the sum of individuals working in an organization (Hoy et al. 2006: 238).

2. LITERATURE REVIEW

Information about organizational mindfulness, which is the main variable of the research, is included in this section.

2.1. Organizational Mindfulness

Organizations consist of interdependent component and each component contributes to the whole. Human beings constitute the most important element of the organization that helps the formation

of the whole in an organization. Therefore, it is clear that the reference of each element in organizational mindfulness is "us" and mindful organization is a product of common capabilities (Vogus, 2011: 666). Organizations with higher mindfulness level have a structure that learns from failures and acts with mindful individuals and leaders (Hoy et al., 2004: 306-307). Also, leaders can create cultures that extensive thinking and mobility as proof of organizational mindfulness Ray et al. (2011: 199). Weick and Sutcliffe (2001: 42) describe organizational mindfulness as existence of continuous improvements and expectations based on experiencing innovations, the examination of expectations, the willingness and ability for innovations, the identification of new contexts that improve functioning and the foresight. According to Ndubisi (2012: 537), focusing now in working, attention to operational details, willingness to consider alternative perspectives and interest for understanding failures are organizational mindfulness. Organizational mindfulness is a process of conscious and careful organizing. According to this view, organizational mindfulness is a social process collectivized by the actions and interactions of individuals (Morgeson and Hofmann, 1999; Vogus and Sutcliffe, 2007).

2.1.1. Five Principles of Organizational Mindfulness

In conventional organizational theory, there is less mindfulness in decision-making processes in order to prevent unexpected situations, investigation based on mobility and interpretation of events (Weick et al., 1999: 91). However, in the modern organization theories, the importance of mindfulness is increasing with the view that an organization is an organic system, forms a whole with the external environment, acts in this direction and environmental uncertainty and complexity are high. In systems and organizations with high levels of complexity and interaction, the scope of a problem cannot be limited; on the contrary, all processes are considered (Magnano et al., 2017: 49). For this reason, organizations must have various principles in order to gain mindfulness skills. In this case, five principles of organizational mindfulness emerge. These five principles show how a mindful organization can skillfully anticipate unexpected events. As Weick and Sutcliffe (2007: 42) explain, in order to manage the unexpected, organizations need to accurately evaluate their expectations, the conditions that create these expectations, the factors that prevent them from seeing expectations and their ability to be mindful for these expectations. In line with the explanations, five principles of organizational mindfulness are preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience and deference to expertise. These principles are explained in detail below.

Preoccupation with failure is paying attention to activities taking steps to prevent the risk of expansion and spread of minor errors (Weick & Sutcliffe, 2015: 7). It involves two key aspects. First, if an organization has preoccupation with failure, there are small clues in its operations that may indicate a larger problem. Secondly, organizations can understand which problems to avoid (McKinniss, 2015: 15). With this understanding, organizations may have the opportunity to realize their drawback, concerns and fears. Reluctance to simplify interpretations is to perceive wisdom in organizations and take conscious steps to question conjectures so as to see a detailed and big picture of ongoing activities (Magnano et al., 2017: 50). According to Weick and Sutcliffe (2001: 11), this is an effort to promote a deeper level of understanding within the organization. In these organizations, managers gather more information to simplify things and insist on trying to understand the actions better (Ray et al., 2011: 192). Sensitivity to operations; is continuous interaction and sharing of information between employees and organizational factors that determine the safety of a system as a whole (Magnano et al., 2017: 50). In this context, sensitivity to operations in organizations also means sensitivity to interconnected transactions (Weick & Putnam, 2006: 285). Sensitivity to operations focuses on reality rather than intentions within an organization. These organizations maintain the mindfulness by paying attention to the details of the ongoing activities and processes to identify minor problems that could turn into bigger problems (Ray et al., 2011: 192). Commitment to resilience is developed primarily with the assumption that any system is perfect. High reliability organizations demonstrate a structure that learns from failure, reinforces their intuition, try to perceive events as a whole and tries to remain sensitive to actual activities based on flexibility (Weick & Sutcliffe, 2015: 12). Resilience and control can be pioneer to overcome an uphill task with mastership and adaptable performance while working (Parker et al., 2015). From the organizational framework, the main feature of organizations that show commitment to resilience is not to be error-free, but the errors that occur in these organizations do not interrupt organizational activities (Weick & Sutcliffe, 2007: 14; Weick & Putnam, 2006: 285; Weick & Sutcliffe, 2001: 67). Deference to expertise; is a process of making decisions with expertise rather than hierarchical decision-making in the organizations. But leader-member exchange increases the sharing knowledge in enterprises with the formation of organizational identification. Increasing knowledge sharing in enterprises increases deference to expertise based knowledge and strengthens internal communication and interaction (Zhao et al., 2019). Deference to expertise includes mindfulness that expert decision-making can occur spontaneously where it is most needed and is independent of place, position or expectations. (Weick & Putnam, 2006: 285; Magnano et al., 2017: 50; Hoy et al., 2006: 252).

3. METHOD

3.1. Purpose of the Research

This study aims to bring the organizational mindfulness scale into Turkish literature by adapting it to Turkish. In this direction, the organizational mindfulness scale developed by Vogus and Sutcliffe (2007) and updated by Weick and Sutcliffe (2015) within the context of highly reliable organizations is discussed. Organizational mindfulness scale is suitable for measurements with data obtained from the large-scale enterprises operating in various sectors in Turkey. In this regard, the aim of the study is to raise awareness in the literature and various sectors.

3.2. Participants and Procedures

The population of the research consists of 131 corporate enterprises which are registered to Istanbul Chamber of Industry in Istanbul, employing 500-1999 employees and having the characteristics of joint stock companies. These enterprises operate in 11 different sectors such as food, textile, chemistry, electricity, metal, glass, automotive, wood, construction, white goods, printing and publishing. Accordingly, the sample of the study consists of 738 participants. Participants' attendance to the survey was voluntary, but the data were collected in a way that did not contain any private personal information. The related questionnaire and data collection process was approved by Namık Kemal University Scientific Research and Publication Ethics Committee on 20.05.2019 with the decision number T2019-6.

It is determined that 56.1% of the participants are male (N = 414), 44% of them are between 31-40 years old (N = 325) and 61.5% of them are married (N = 454). It is mostly seen that 45.3% of the participants are undergraduate (N = 334). In addition, 36.9% of the participants' income is determined to be 3000 TL or less (N = 272). 25.6% of the participants has 15 years or more professional experience (N = 189). However, it is determined that 33.9% of the participants worked in the existing institutions for less than 3 years (N = 250). Also, 59.8% of the participants don't have managerial duties (N = 441). In addition, 74.7% of the participants preferred their profession willingly (N = 551).

3.3. Measures

Organizational mindfulness scale is developed by Vogus and Sutcliffe (2007, 2012). The scale is formed within the scope of the literature of collective mindfulness in the HROs, which are expressed in five stages as preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience and deference to expertise (Weick & Sutcliffe, 2001). This scale measures the degree of engagement of employees with the organization, their view of organizational activities and how employees perceive the stakeholders of a business, quality assurance, management of uncertainty and other positive business practices.

The reliability of the organizational mindfulness measure is found to be 0.88 for the English version (Vogus & Sutcliffe, 2007). One-dimensional organizational mindfulness scale isn't used in any study in Turkey. Therefore, to form the Turkish version of Organizational Mindfulness Scale, back translate done in accordance with expert opinions and the intelligibility of the items was evaluated. After that, the scale is adapted to Turkish by performing the necessary analyzes like validity and reliability.

4. DATA ANALYSIS

In this study, data was analyzed with Lisrel 8.7 and SPSS 25 program and confirmatory and exploratory factor analyzes were used to determine validity and reliability. The confidence interval was taken as 95%. Confirmatory factor analysis was done to investigate and confirm factors construct of the questionnaire translated into Turkish. In the reliability study, internal consistency with item analysis, item total correlation analysis, item discrimination analysis and Cronbach Alpha coefficient were examined. Then the validity of the scale was tested with explanatory factor analysis and validity for explained factor structures analyzed with Lisrel 8.7 program.

4.1. Reliability Study of Organizational Mindfulness Scale

The item analysis results are shown in Table 1 below regarding the scale of organizational mindfulness. At this stage, it is sufficient that the relationship of one substance with other substances is not less than 0.30. However, it is known that taking this value to 0.45 will increase the reliability in some sensitive studies (Kerlinger, 1973; Büyüköztürk, 2009). The results of item analysis are given in the table below.

Table 1: Statistics on Organizational Mindfulness Scale Items

Item No	Item Average	Item Standard Deviation	Total Item Correlation	Reliability Co-efficient If Item Deleted
Item 1	31,088	30,308	0,633	0,924
Item 2	31,117	29,997	0,737	0,917
Item 3	31,192	29,876	0,712	0,919
Item 4	31,091	29,798	0,773	0,915
Item 5	31,053	29,887	0,739	0,917
Item 6	31,119	29,780	0,747	0,917
Item 7	31,122	29,917	0,759	0,916
Item 8	31,103	29,810	0,736	0,917

When Table 1 is examined, it is determined that there are no items below 0.45 on the organizational mindfulness scale and it is decided that there is no need to remove items from the scale. Cronbach's Alpha analysis is done to specify internal scale consistency and approaching this value to 1 means high reliability (Liu, 2003; Güzel-Candan & Evin-Gencel, 2015). In this case, the reliability level of the scale is found to be high ($\alpha =$, 926).

After this stage, the relationship between the variables and the total scale is examined. thereby, the correlation value of "r>, 30" indicates that the data set is suitable for factor analysis. According to Table 2, the relationship between scale items and the total scale complies with this criterion. In Table 2, the relationship between items and total scale is found to be statistically significant between 0.718-0.825. In the light of these findings, it is seen that the relation of each item of the scale with the total score is sufficient and shows consistency.

Table 2: Item and Total Scale Correlation Values of Organizational Mindfulness Scale

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Item No	r	p
Item 1	0,718	0,000**
Item 2	0,797	0,000**
Item 3	0,779	0,000**
Item 4	0,825	0,000**
Item 5	0,799	0,000**
Item 6	0,806	0,000**
Item 7	0,813	0,000**
Item 8	0,797	0,000**
Item 9	0,812	0,000**

^{**}p<0.01

The scale consisting of 9 questions related to organizational mindfulness scale provided a certain correlation between the variables which are prerequisites of factor analysis. As a result, Barlett test, KMO value, and relations of variables show the level of convenience for the factor analysis of the data set (Tabachnick & Fidel, 2014; Huck, 2012; Kemani et al., 2019). KMO value greater than 0.60 indicates the suitability of the data for factor analysis (Eroğlu, 2008; Büyüköztürk, 2009; Huck, 2012).

4.1.1. Validity of Organizational Mindfulness Scale

Table 3: Results of KMO and Barlett Sphericity Test of Organizational Mindfulness Scale

	Statistic	Value
KMO Sample Adequacy		0,950
	Chi-Square Value (χ2):	4055,226
Barlett Sphericity Test	Degree of freedom (sd):	36
	Significance level (p):	0,000

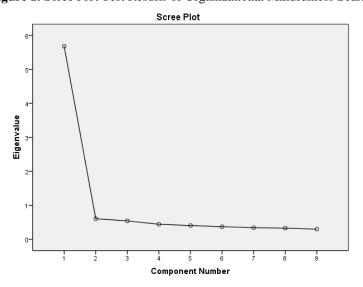
As given by Table 3, KMO value as 0.950 and Barlett test significance (at p <0.01) shows the sample number is adequate to do factor analysis. Also it shows that the data is procured by multivariate normal distribution (Kan & Akbaş, 2005). In the next process, Principal Component Analysis is used for factor extraction and varimax vertical rotation method is used as the vertical rotation way to clear that the factors are rotated in exploratory factor analysis, however, because of the scale having a single factor structure it is observed that the rotation process could not be performed. The factor analysis results are carried out with nine-item organizational mindfulness scale and a single factor structure explaining 63,147% of the total variance is found. Table 4 shows the findings of the analysis.

Table 4: Eigen Values of Organizational Mindfulness Scale and Variance Level Explained

nts		Initial Eige	n values	Sum of Squares of Loads			
Components	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %	
1	5,683	63,147	63,147	5,683	63,147	63,147	

The organizational mindfulness scale possesses a single factor structure by Eigen value greater than 1.00. Single factor structure explains 63,147% of the total variance. The number of factors covered by the amount of 2/3 of the total variance related to the variables in the analysis is considered to be significant. Moreover, it is accepted that the variance explained for social sciences is between 40% and 60% (Scherer, Wiebe, Luther & Adams, 1988; Eroğlu, 2008). In this case, it can be said that the total variance is quite sufficient. Scree plot test chart is another method to verify the conformity of the factor structure. In Figure 1, it is seen that the break occurs after the first dimension and thus all items of the scale have logical integrity.

Figure 1. Scree Plot Test Results of Organizational Mindfulness Scale



Factor load value reveal the relationship between item and factor is examined to determine which factor the items in the scale are located under.

Table 5: Factor Load Values of Organizational Mindfulness Scale

Items	Factor 1	Reliability Level
1.Şirketimizin her bir çalışanına ait yetenek ve becerilerinin potansiyelini gösteren veriler mevcuttur.	0,704	
2. Hatalar ve hatalardan nasıl ders alınabileceği hakkında konuşuruz.	0,798	
3. Hangimizin konu ile ilgili uzmanlık becerisi ve bilgisi olduğunu görmek için kendine has yeteneklerimiz üzerine birbirimizle tartışırız.	0,776	
4. Olağan iş faaliyetlerimizin nasıl yürütüleceği ile ilgili alternatifler üzerine konuşuruz.	0,828	
5. Ortaya çıkan problemleri iş arkadaşlarımızla tartıştığımızda genellikle neye dikkat etmemiz gerektiğini konuşuruz.	0,803	0,926
6. Bir sorunu ortadan kaldırma girişiminde bulunduğumuzda çalışanlarımızın kendine has yeteneklerinden yararlarınız.	0,807	
7. Yanlış ya da ters gitmesini istemediğimiz faaliyetleri net bir biçimde tanımlamaya zaman ayırırız.	0,817	
8. Bir hata olduğunda "hata olmadan daha önce nasıl engelleyebilirdik" diye tartışırız.	0,798	
9. Bir kriz oluştuğunda kuruma özgü ortak uzmanlığımızı kullanarak çözüme yönelik girişimde bulunuruz.	0,814	

Factor load values are given in Table 5 When the findings in the table are evaluated, the factor load value is >, 45 (Çokluk et al., 2016) and the difference between the two factor load values is at least > 10 (Büyüköztürk, 2009) are taken into consideration. As seen in the table, the factor load values vary between 0,704-0,828. No substance extraction is required according to the level of factor loads. According to Table 5, items collected under factor 1 are respectively determined as 1,2,3,4,5,6,7,8 and 9. When the items under factor 1 are examined, it is found appropriate to give factor 1 the name of the scale as "Organization Mindfulness". The results of the reliability analysis of the organizational mindfulness ($\alpha =$, 926) are found to be high.

Table 6 presents the findings of the item statistics of the CFA analysis conducted to test the factor structure of the organizational mindfulness scale.

Table 6: Organizational Mindfulness Scale DFA Item Statistics

Factor	Item Factor load value		R ²	Error Variance	t
	1	0,66	0,44	0,56	19,56**
	2	0,77	0,59	0,41	24,09**
	3	0,74	0,55	0,45	22,94**
	4	0,81	0,66	0,34	25,94**
ORGANIZATIONAL MİNDFULNESS	5	0,78	0,61	0,39	24,77**
	6	0,78	0,61	0,39	24,80**
	7	0,79	0,62	0,38	25,37**
	8	0,77	0,59	0,41	23,23**
	9	0,79	0,62	0,38	25,14**
**p<0.01					

When Table 6 is examined, it can be said that the factor structure of the organizational mindfulness scale obtained from the EFA is confirmed by the CFA findings in terms of item statistics (Bandalos & Finney, 2010). Accordingly, factor load values of the items ranged from 0.66 to 0.81. These values can be evaluated as medium and high factor loadings. On the other hand, the values (R2) related to the multiple correlation square vary between 0.44-0.66. In this context, it can be stated that R2 value is also in high and middle context (Kline 2009). t values, which is the expression of statistical significance level of the relationships between items and implicit variables, were found to be significant at p <0,01 level and all t values were greater than 2.58. The path diagram of the organizational mindfulness scale is presented below in the **Figure 2**.

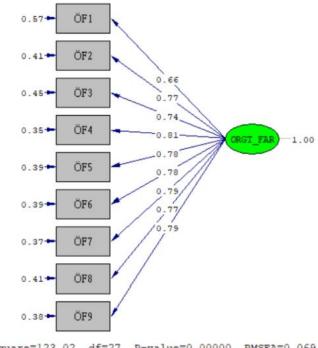


Figure 2: Organizational Mindfulness Scale Path Diagram

Chi-Square=123.02, df=27, P-value=0.00000, RMSEA=0.069

Table 7 presents goodness of fit of organizational mindfulness scale. Since X2 / df, RMSEA values are in the desired criteria, no modification is necessary. It can be said that goodness of fit values confirms the organizational mindfulness scale.

Table 7: Organizational Mindfulness Scale Goodness of Fit Values

Criteria	X ² /	р	RMS	CFI	GFI	AGFI	NNFI	NFI	RMR	SRMR
Organizational Mindfulness	df 4,55	,000	,069	,990	,960	,940	,990	,990	,018	,025
Acceptable Goodness of Fit Criteria Limits	≤5	<0.05	$\begin{array}{c} 0.05 \leq \\ \text{RMS} \\ \text{EA} \leq \\ 0.10 \end{array}$	0.90 ≤CFI ≤ 0.95	0.90 ≤GFI ≤ 0.95	0.85 ≤ AGFI ≤ 0.90	0.90 ≤NNFI ≤ 0.95	0.90 ≤NFI ≤ 0.95	0.05 ≤ RMR ≤ 0.10	$\begin{array}{l} 0.05 \leq \\ \text{SRMR} \\ \leq 0.10 \end{array}$

In order for a model to be acceptable as a whole, the reported goodness of fit indices must be within acceptable limits. It is seen that the fit index values obtained from DFA are among acceptable fit indexes. The most important fit index value X2 / df is found to be within the acceptable fit range of 4.55. Also the RMSEA value is found to be within the acceptable fit range of 0.069.

5. DISCUSSION

Nowadays, each organization should have the skills and characteristics of the HRO in order to survive in the long term, to achieve sustainable competitive advantage and to perform fully. In today's conditions, where the effects of the external environment are most intensified with increasing dynamism, the ability of organizations to gain organizational mindfulness skills by demonstrating the characteristics of HRO will increase their ability to survive and perform effectively. Therefore, it is important to understand what the concept of organizational mindfulness actually means and which events and activities can provide organizational mindfulness to the enterprises.

In this context, this study aims to bring the organizational mindfulness scale into Turkish literature by adapting it to Turkish. In this direction, the organizational mindfulness scale developed by Vogus and Sutcliffe (2007) and updated by Weick and Sutcliffe (2015) within the context of highly reliable organizations was discussed. Organizational mindfulness scale is suitable for measurements with data obtained from the large-scale enterprises operating in various sectors in Turkey. And the single factor structure of the scale was also preserved in Turkish form. In this context, it is stated that the scale can be used in national literature.

It is thought that the organizational mindfulness scale and literature of the present study will be accepted as important in the national literature. The most important reasons for this are the limited number of studies conducted at the national level and Organizational mindfulness developed by Weick and Sutcliffe (2001) is not adequately covered in national literature.

6. LIMITATIONS AND FUTURE RESEARCH

The main limitation of this study is the application of this study on institutional and large scale enterprises. Because, in order to generalize the results of the research within the scope of institutional manufacturing enterprises, a lot of research is needed in the field. After that, taking into consideration this limitation, different types of enterprises and different sectors can be conducted. In addition, this research was conducted on white collar workers. Determining the attitudes of blue collar employees towards organizational mindfulness in future research will be able to unroll employees' perception of the organizational structure and job in Turkey.

The concept of organizational mindfulness is a new concept in the literature. Despite its conceptualization on highly reliable organizations, it has become an important issue for every company that operates under competition. Also it is important to carry out various studies on how this new concept will perceived by the top management. It will be possible to establish a standard structure through various researches that will determine the level of organizational mindfulness.

7. CONCLUSIONS AND RECOMMENDATIONS

In the light of all the findings obtained within the scope of study, it is seen that the organizational mindfulness scale, which is composed of nine items, is consistent with the original scale. In

addition, the validity and reliability of the scale were high as the original scale ($\alpha =$, 926). In this context the scale of Turkey said to be reliable in measuring organizational mindfulness.

Organizational mindfulness has been created by starting from highly reliable organizations, but it has made an important contribution to organizational literature by making its structure suitable for all enterprises. Organizational mindfulness, which is handled with dimensions as preoccupation with failure, reluctance to simplify, sensitivity to operations and commitment to resilience and deference to expertise, provides a fundamental key for organizations to gain superiority over their competitors and to survive powerfully.

The study, which gained the theoretical framework of organizational mindfulness and scale into the Turkish literature, endeavored to provide a deep understanding for the five component of organizational mindfulness. In this study, it is suggested that organizations should act within the framework of these five component while determining their periodical goals, developing new strategies, taking various decisions and trying to deal with crisis situations. The first reason for this proposal is that deference to expertise increases the value given to employees by determining who is competent in a workplace and when unexpected situations occur, problems are solved as a result of applying to expertise in a short time. With the commitment to resilience, organizations can gain strength and remain strong in the face of adverse situations or unexpected changes. Preoccupation with failure gives the business the agility that prevent before an error occurs. Furthermore, being innovative in the mistakes, crises or routine decisions made in organizations means being proactive. The realization of every activity in an organization by reluctance to simplify interpretations and spreading this practice to the base can ensure that every employee is aware of important decisions, goals, objectives and changes in the enterprise. Having knowledge about which activities are performed in organizations for the purpose of strengthening employees' perception of meaning may cause positive business outcomes. Finally, with the sensitivity to operations, the contribution of even the smallest organizational activity to the whole can be understood and the importance given to employees and labor increases. Thus, with the application of these principles, which will bring organizational mindfulness to organizations, enterprises will be able to continue their activities in a long time with high performance, satisfied employees and effective organizational success.

Conflict of Interest

The authors declare that there is no conflict of interest arising from the study on the part of the authors or third parties.

REFERENCES

- Bandalos, D. L., & Finney, S. J. (2010). Factor analysis: exploratory and confirmatory. G. R. Hancock, & R. O. Mueller (Dü) içinde, *The reviewer's guide to quantitative methods in the social sciences* (s. 93-114). New York, Routledge. https://doi.org/10.4324/9781315755649.
- Büyüköztürk, Ş. (2009). Sosyal bilimler için veri analizi el kitabı: istatistik, araştırma deseni, spss uygulamaları ve yorum (9 b.). Ankara: Pegem Yayınları.
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2016). Sosyal bilimler için çok değişkenli istatistik: spss ve lisrel uygulamaları (4. Baskı). (4 b.). Ankara: Pegem Akademi.
- Eroğlu, A. (2008). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. (Ş. Kalaycı, Dü.) Ankara: Asil Yayın Dağıtım.

- Fiol, C. M., & O'Connor, E. J. (2003). Waking up! mindfulness in the face of bandwagons. *The Academy of Management Review*, 28(1), 54-70. https://doi.org/10.2307/30040689.
- Gencel, İ. E., & Candan, D. G. (2015). Öğretmen adaylarının eleştirel düşünme eğilimleri ve yansıtıcı düşünme düzeylerinin incelenmesi. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi, 4*(8), 55-68. https://doi.org/10.24106/kefdergi.2211.
- Hoy, W. K., Gage, C. Q., & Tarter, C. J. (2004). Theoretical and empirical foundations of mindful schools. W. K. Hoy, & C. Miskel (Dü) içinde, *Educational administration, policy and reform: research and measurement* (s. 305-335). Greenwich: Information Age Publishing.
- Hoy, W. K., Gage, C. Q., & Tarter, C. J. (2006). School mindfulness and faculty trust: necessary conditions for each other? *Educational Administration Quarterly*, 42(2), 236-255. https://doi.org/10.1177/0013161X04273844.
- Huck, S. W. (2012). Reading statistics and research. Boston: Pearson.
- Kan, A., & Akbaş, A. (2005). Lise öğrencilerinin kimya dersine yönelik tutum ölçeği geliştirme çalışması. *Mersin Üniversitesi Eğitim Fakültesi Dergisi, 1*(2), 227-237. https://doi.org/10.17860/efd.08969
- Kemani, M., Grimby-Ekman, A., Lundgren, J., Sullivan, M., & Lundberg, M. (2019). Factor structure and internal consistency of a Swedish version of the pain catastrophizing scale. *Acta Anaesthesiologica Scandinavica*, 63(2), 259-266. https://doi.org/10.1111/aas.13246
- Kerlinger, F. N. (1973). *Foundation of behavioural research*. New York: HRW Holt, Rinehart and Winston.
- Kline, R. (2009). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Langer, E. J. (1993). A mindful education. *Educational Psychologist Journal*, 28(1), 43-50. https://doi.org/10.1207/s15326985ep2801_4
- Liu-Thompkins, Y. (2003). Developing a scale to measure the interactivity of websites. *Journal of Advertising Research*, 43, 207-216. https://doi.org/10.1017/S0021849903030204
- Magnano, P., Platania, S., Ramaci, T., & Santisi, G. (2017). Validation of the Italian version of the mindfulness organizing scale (mos) in organizational contexts. *Testing, Psychometrics, Methodology in Applied Psychology Journal*, 24(1), 45-64. https://doi.org/10.4473/TPM24.1.3
- McKinniss, S. A. (2015). Case studies of organizational mindfulness and shared governance. Ohio: The Ohio State University Graduate Program in Educational Policy and Leadership, Unpublished Doctoral Dissertation.
- Morgeson, F. P., & Hofmann, D. A. (1999). The structure of collective constructs: implications for multilevel research and theory development. *Academy of Management Review* (24), 249-265. https://doi.org/10.2307/259081

- Ndubisi, N. O. (2012). Mindfulness, reliability, pre-emptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector. *Journal of Business Research* (65), 537-546. https://doi.org/10.1016/j.jbusres.2011.02.019
- Parker, S. L., Jimmieson, N. L., Walsh, A. J., & Loakes, J. L. (2015). Trait resilience fosters adaptive coping when control opportunities are high: implications for the motivating potential of active work. *Journal of Business and Psychology*, 30(3), 583-604. https://doi.org/10.1007/s10869-014-9383-4
- Pirson, M., Langer, E., Bodner, T., & Zilcha-Mano, S. (2012). The development and validation of the langer mindfulness scale—enabling a socio-cognitive perspective in mindfulness in organizational contexts. *Fordham University Schools of Business Research Paper*, 1-54.
- Ray, J. L., Baker, L. T., & Plowman, D. A. (2011). Organizational mindfulness in business schools. *Academy of Management Learning & Education*, 10(2), 188-203. https://doi.org/10.5465/amle.10.2.zqr188
- Scherer, R. F., Wiebe, F. A., Luther, D. C., & Adams, J. S. (1988). Dimensionality of coping: factor stability using the ways of coping questionnarie. *Psychological Report*, 62(3), 763-770. https://doi.org/10.2466/pr0.1988.62.3.763
- Sheedy, E. A., Griffin, B., & Barbour, J. P. (2017). A framework and measure for examining risk climate in financial institutions. *Journal of Business and Psychology*, 32(1), 101-116. https://doi.org/10.1007/s10869-015-9424-7
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics*. USA: Pearson Education Limited.
- Vogus, T. J. (2011). Mindful organizing establishing and extending the foundations of highly reliable performance. G. M. Spreitzer, & K. S. Cameron (Dü) içinde, *The oxford handbook of positive organizational scholarship* (s. 664-676). New York: Oxford University Press.
- Vogus, T. J., & Sutcliffe, K. M. (2007). The safety organizing scale: development and validation of a behavioral measure of safety culture in hospital nursing units. *Medical Care*, 45(1), 46-54. https://doi.org/10.1097/01.mlr.0000244635.61178.7a
- Vogus, T. J., & Sutcliffe, K. M. (2012). Organizational mindfulness and mindful organizing: a reconciliation and path forward. *Academy of Management Learning and Education*, 11(4), 722-735. https://doi.org/10.5465/amle.2011.0002C.
- Weick, K. E., & Putnam, T. (2006). Organizing for mindfulness eastern wisdom and western knowledge. *Journal of Management*, 15 (3), 275-287. https://doi.org/10.1177/1056492606291202
- Weick, K. E., & Sutcliffe, K. M. (2015). *Managing the unexpected: sustained performance in a complex world* (3 b.). Hoboken, New Jersey: John Wiley & Sons Press.
- Weick, K. E., & Sutcliffe, K. M. (2001). *Managing the unexpected. assuring high performance in an age of complexity*. San Francisco: CA:Jossey-Bass.

- Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: resilient performance in an age of uncertainity*. San Francisco: CA: Jossey-Bass.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for high reliability: processes of collective mindfulness. (R. S. Sutton, B. V. Shaw, & B. M. Shaw, Dü) *Research in Organizational Behaviour*, 81-123.
- Zhao, H., Liu, W., Li, J., & Yu, X. (2019). Leader—member exchange, organizational identification and knowledge hiding: the moderating role of relative leader—member exchange. *Journal of Organizational Behavior*, 40(7), 834–848. https://doi.org/10.1002/job.2359.