Published online 2019 March 12.

Research Article

The Relationship of Mindfulness with Burnout and Adaptive Performance with the Mediatory Role of Resilience Among Iranian Employees

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Received 2018 December 17; Revised 2019 February 06; Accepted 2019 February 13.

Abstract

Background: Today, stress and burnout are common problems among employees working in service industries; however, they have serious consequences for organizations and can lead to lower productivity. Thus, it is important to identify the factors reducing occupational stress and burnout.

Objectives: We aimed to investigate the relationship of mindfulness with burnout and adaptive performance with the mediatory role of resiliency.

Methods: Participants consisted of 220 employees from an industrial company who were selected by using the stratified random sampling method. The data collection instruments were Mindful Attention and Awareness Scale (MAAS), Aadaptive Performance Questionnaire, Burnout Questionnaire, and Resilience Questionnaire. Data were analyzed using structural equation modeling (SEM) in SPSS version 23 and AMOS 23 software programs.

Results: SEM confirmed the proposed model's fitness. The results indicated the direct and indirect effects of mindfulness on adaptive performance and burnout through resiliency.

Conclusions: According to the results, one of the strategies for alleviating burnout and improving employees' health and adaptation to workplace is the training of mindfulness skills with the aim of enhancing resilience skills against the stressful and challenging workplace conditions.

Keywords: Mindfulness, Resilience, Burnout, Adaptive Performance

1. Background

Today, stress and burnout are common and serious problems among employees working in the human services industry. This phenomenon leads to physical and emotional illnesses that can lead to increased absenteeism and reduced turnover and productivity (1). Occupational burnout causes impulsiveness, sensitivity, and fatigue. Long-term stress can cause employees experience burnout (2). Also, a previous study has shown that 40% of workers reported that their jobs were "very or intense stressful", and 26% stated that they "often or more often have stress in their work" (3). Therefore, paying attention to burnout and occupational stress can be very effective in organizations. Some employees are very resilient in the face of extreme stressing conditions and show resilience in a relatively unstable manner against stressful situations (4). Therefore, attention to this feature of individuals and the related factors in organizations can be useful for organizations to improve employee's health and reduce burnout.

Moreover, organizational change is a major concern for many organizations. Today, organizations have greatly changed and confronting change can be very difficult for employees. Employees who are against change often feel like losing territory, they are uncertain about what is going to happen in the future and may feel afraid of making mistakes in new tasks (5). All these factors make it difficult to accept changes in the organization, so paying attention to more adaptive performance among employees can be helpful in improving an organization's performance.

Adaptive performance is defined as the ability to change behavior to match the environmental requirements of a new position (6). Due to the nature of today's organizations, that is confrontation with uncertain and dynamic environments, employees require to learn new skills and increase their adaptability (7). Organizations

Copyright © 2019, Annals of Military and Health Sciences Research. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited. with adaptive employees can more easily respond to environmental changes and have higher performance and productivity. One of the ways to increase adaptive performance and reduce burnout in organizations is mindfulness. Mindfulness means to be conscious and pay attention with interest to the experience that is going on here and now. Mindfulness has many aspects, for example, living in the moment instead of drowning in thoughts, being completely engaged in what one is doing, and letting feelings be as they are and allowing them come and go instead of controlling them. When we look at our inner experiences with acceptance, even in the case of painful memories, feelings, and thoughts, feelings are considered less threatening and unbearable. Thus, mindfulness helps reduce the impact of negative feelings and thoughts (8).

Karanika-Murray and Weyman (9) believe programs such as mindfulness from the fields of healthcare and health can be transferred to occupational and organizational fields. Accordingly, workplace mindfulness programs have been developed to improve employees' mental health and performance. Several studies have shown that mindfulness is related to job performance (10). Mindfulness helps employees to improve their performance by improving levels of performance, reducing performance changes, protecting individuals against disturbances or distraction, and providing orientation and motivation (10).

Mindfulness helps people to ignore the usual judgments and interpretations that come to their minds and protects them against intense emotions and reactions that lead to mental and psychological illnesses (11). Also, the results of various studies showed that mindfulness had a negative impact on burnout (12, 13). Mindfulness prevents employees from burnout by reducing emotional exhaustion (12). In general, mindfulness reduces negative thoughts about the environment and is an antidote against the mind's reactivity in the workplace (14). This helps employees have less reactions to stressful situations in the workplace and have more resilience (4). Therefore, under these conditions, the probability of a person's burnout is reduced. Resilience is one of the mechanisms through which mindfulness can reduce burnout and improve adaptive performance. Resilience is defined as the ability to "maintain psychological stability in the face of stress" (14). Wagnild (2009) explained resilience as being sustainable and independent, having a clear goal in life, and being constantly eager and positively adaptive in the face of difficulty. In fact, resilience is a personal characteristic that helps individuals to face failure and maintain their efforts towards advancement. This is a feature that can protect employees against unpleasant effects and harms (15, 16).

Positive outcomes are related to having resilience, reducing the negative effects of tension, enhancing adaptability, and creating effective coping skills to deal with change and inconsistency (17). Research has shown that resilience can be enhanced through psychological training, such as mindfulness-based training (18, 19). Also, Keye and Pidgeon (20) showed that mindfulness can increase resilience.

Studies have shown the relationship between resiliency and various outcomes such as mental health, burnout, post-traumatic stress disorder, depression, and anxiety (21, 22). According to previous studies, mindfulness is the foreground and predictor of resiliency (20, 23, 24), and it is negatively correlated with burnout (13, 14, 21, 22, 25, 26) and it has a mediatory role between mindfulness and burnout (27). What's more, it has been suggested that resiliency helps employees to be more adaptive in their work environment.

2. Objectives

The purpose of this study was to examine the model shown in Figure 1.

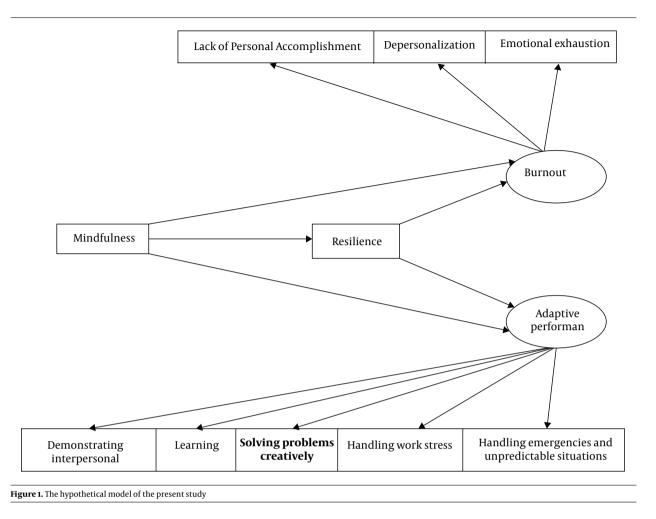
3. Methods

3.1. Participants

We enrolled 220 employees (186 men and 34 women) from the South Ahvaz Railway Company in 2018. The participants were selected by using the stratified random sampling method. The subjects were from different organizational units (i.e., administrative, information technology, commercial, technical, and strategic), and they were selected randomly based on the proportion of the population of each unit. In this study, the sample size was determined based on the number of study parameters. Based on Kline's suggestion for each parameter calculated, at least 10 participants are required to test the model (28). In the present study, the number of parameters was calculated according to the number of direct paths (13 paths), the number of independent variables (1 variable), and the number of error variances (3 errors). Considering the sample size of the present study (220 participants), the number of participants for each parameter was about 13, which indicates the adequacy of the samples for testing the model.

3.2. Procedure

The conceptual model detailed in Figure 1 was analyzed using path analysis procedures with the statistical software package, AMOS-23. Path analysis procedures are more advantageous in enabling researchers to test and



compare a priori competing models. Decomposition of effects, similarly, provides clarity regarding the direct and indirect intercorrelations between variables. In relation to the goodness-of-fit index values, we chose to use the following: (I) the chi-square statistics (χ^2) and degree of freedom (df), (II) the comparative fit index (CFI) (CFI value ≥ 0.90), (III) the normed fit index (NFI) (NFI value ≥ 0.90), (IV) the

incremental fit index (IFI) (IFI value ≥ 0.90), and (V) the

root mean square error of approximation (RMSEA) (RMSEA value \leq 0.080).

3.3. Instruments

3.3.1. Resilience

Resilience Questionnaire, Smith et al. (29), is a 6-item scale rated on a 5-point Likert scale (one for "almost always" and a score of 6 for "almost never"). The reliability of the questionnaire based on the Cronbach's alpha coefficient was reported to be between 0.80 and 0.91. In another study in Iran, reliability coefficient of this questionnaire by Cronbach's alpha method was 0.725. Construct validity was also established through confirmatory factor analysis. The values of IFI (0.95), CFI (0.95), RMSEA (0.07) and relative chisquare (2.60) confirmed the validity of this questionnaire (30). In this study, Cronbach's alpha coefficient was 0.75 indicating that the scale is reliable.

3.3.2. Mindfulness

Mindful Attention and Awareness Scale (MAAS) is a 15item scale. Its items are rated on a 6-point Likert scale (one for "almost always" and a score of 6 for "almost never"). The internal consistency of the questions based on Cronbach's alpha coefficient was reported to be between 0.80 and 0.87 (31). Cronbach's alpha for the Persian version of this scale was calculated to be 0.81 in a sample of 723 students (32). In this study, Cronbach's alpha coefficient was 0.77, confirming the reliability of the scale.

3.3.3. Adaptive Performance

Adaptive Performance Scale, Charbonnier-Voirin et al. (33), is a 19-item scale and includes the five factors of

handling emergencies and unpredictable situations (four items), handling work stress (three items), solving problems creatively (four items), learning (four items), and demonstrating interpersonal adaptability (four items). Charbonnier-Voirin et al. (33) examined the validity of this questionnaire by confirmatory factor analysis. The results showed that the five-factor model had satisfactory fitness according to the indices of CFI = 0.95 and RMSEA = 0.05. The alpha coefficient for the total questionnaire was calculated to be 0.87. In another research in Iran, reliability coefficients of this questionnaire by Cronbach's alpha and split-half methods were 0.93 and 0.88, respectively (34). In the present study, Cronbach's alpha and split-half reliability of this scale were 0.90 and 0.85, respectively.

3.3.4. Burnout

Job Burnout Questionnaire, Maslach and Jackson (35), includes 22 items, nine of which are related to emotional exhaustion, eight related to the lack of personal accomplishment, and five are concerned with depersonalization. The 22 items are rated from never (score 0) to very high (score 6) (35). Maslach et al. (36) calculated the internal consistency of the questionnaire using Cronbach's alpha (0.83). This questionnaire was validated by Filyan (1992), and its test-retest reliability coefficient was estimated at 0.78 (37). The reliability coefficients for the whole questionnaire and for emotional exhaustion, lack of personal accomplishment, and depersonalization were 0.84 0.78, 0.83 and 0.88, respectively, demonstrating acceptable reliability of the questionnaire.

4. Results

The mean and standard deviation age of the participants was 37.44 \pm , and 9.65 years, respectively and 17.27% had diploma, 14.09% were undergraduate, 41.82% were graduate, and 26.82% had master's degree and above. Also 84.54% of the subjects were male and 82.28% were married. The participants' mean years of experience was 14.38 years

Means, standard deviations, and the bivariate correlations among the variables are presented in Table 1. As can be noted, all the correlations between the variables were significant at P < 0.01. Fit indices for the proposed and final models are presented in Table 2. The proposed model was tested through SEM. Fit indices show that the proposed model is fitted with data.

Bootstrapping procedures were used to test the mediation paths. We generated 5000 bootstrapping samples from the original dataset (N = 220). Table 3 displays the direct effects and Table 4 exhibits the indirect effects and their associated 95% confidence intervals. As presented in Table 4, mindfulness has a significant indirect effect on burnout and adaptive performance through resilience. Figure 2 presents the final model and standardized regression weights.

5. Discussion

The purpose of this study was to investigate the relationship of mindfulness with burnout and adaptive performance through the mediatory role of resilience. The results showed that mindfulness, both directly and indirectly, affects adaptive performance and burnout through resilience. The proposed model has a fair fit for all fitness indicators. Also, the coefficients of direct and indirect paths were generally meaningful. The present study showed that mindfulness has a positive and direct correlation with resilience (11). The mindfulness skill raises our awareness regarding the nature of the transition of emotions and negative thoughts, which leads to more flexible and clear responses to the environment (38). Also, mindfulness helps to prevent burnout among employees with stressful jobs through its influence on emotional exhaustion, which is one of the three components of burnout (14). In general, mindfulness reduces the judgment of the "mind" and mindfulness is the antidote against reactivity of the mind in the working environment. This ability helps employees to lower reactivity against stressful situations in the workplace and allows them to adopt the right measures against stressful conditions, preventing them from experiencing burnout. In addition, mindfulness in the workplace can help improve performance (38). In fact, at any point in time, there are many internal and external phenomena that one may not be aware of. Mindfulness, through connecting employees to their inner feelings and beliefs and understanding the external environment and what they are doing, leads individuals to have better performance in the workplace (39) and be more adaptive in the workplace.

Also, our findings showed that resiliency has a negative relationship with burnout. Temporary challenges provide resilient employees good opportunities for coping with old harms, discovering new coping mechanisms, and generally, reorganizing their views about life, which makes it possible to experience less burnout in stressful situations with higher adaptability (20).

The results of the bootstrap test indicate the significant indirect paths of the variables at the level of 0.001. Therefore, resilience has a mediatory role in the relationship of mindfulness with burnout (27) and adaptive performance. As mentioned before, mindfulness increases resilience and leads employees to have be adaptable and have more adaptive performance in different job situations and experience less burnout and occupational stress.

/ariables	Mean \pm SD	Mindfulness	Resilience	Adaptive Performance	Burnout
Mindfulness	65.380 ± 9.710	-			
tesilience	19.100 ± 3.471	0.40 ^a	-		
daptive performance	66.46 ± 11.871	0.46 ^a	0.51 ^a	-	
Burnout	69.52 ± 10.79	-0.53 ^a	-0.42 ^a	-0.45 ^a	

Variable Fit Indices	χ^2	df	$\chi^2/{ m df}$	NFI	CFI	IFI	RMSEA
Acceptable values	-	-	< 5	\geq 0.90	\geq 0.90	\geq 0.90	\leq 0.080
Proposed model	88.74	32	2.77	0.94	0.95	0.96	0.07

Abbreviations: CFI, comparative fit index; IFI, incremental fit index; NFI, normed fit index; RMSEA, root mean square error of approximation.

Table 3. Direct Effects for the Final Mediational Model							
Paths	Standard Estimates	Non-Standard Estimation	S.E.	C.R.	P Value		
Mindfulness $ ightarrow$ burnout	-0.24	-0.32	0.04	-5.64	0.001		
Mindfulness $ ightarrow$ adaptive performance	0.29	0.43	0.22	4.48	0.001		
$\mathbf{Mindfulness} \rightarrow \mathbf{resilience}$	0.42	0.29	0.02	6.43	0.001		
Resilience $ ightarrow$ burnout	-0.32	-0.18	0.08	-3.84	0.001		
Resilience $ ightarrow$ adaptive performance	0.23	0.36	0.07	2.21	0.002		

Table 4. Indirect Effects for the Final Mediational Model

Indirect Paths	Indirect Effect –	95% Confide	— P Value	
	marrett Enect	Lower	Upper	
$\mathbf{Mindfulness} \rightarrow \mathbf{resilience} \rightarrow \mathbf{adaptive} \ \mathbf{performance}$	0.119	0.0636	0.2082	0.001
Mindfulness $ ightarrow$ resilience $ ightarrow$ burnout	0.223	0.1102	0.2681	0.001

5.1. Conclusions

Based on the findings of this study, one of the methods of improving burnout and employees' health and increasing adaptation of employees in the workplace is the training of mindfulness skills with the aim of increasing their resilience skills against stressful and challenging workplace conditions.

Acknowledgments

We wish to thank all the participants who helped us to complete this study.

Footnotes

Authors' Contribution: Mostafa Asheghi participated in data analysis, writing, and coordination of efforts. Es-

maeil Hashemi assisted with writing and editing of the manuscript.

Conflict of Interests: It is not declared by the authors.

Ethical Considerations: This article was extracted from a master's thesis in Industrial and Organizational Psychology submitted to Shahid Chamran University of Ahvaz with the code of ethics 295.

Funding/Support: It is not declared by the authors.

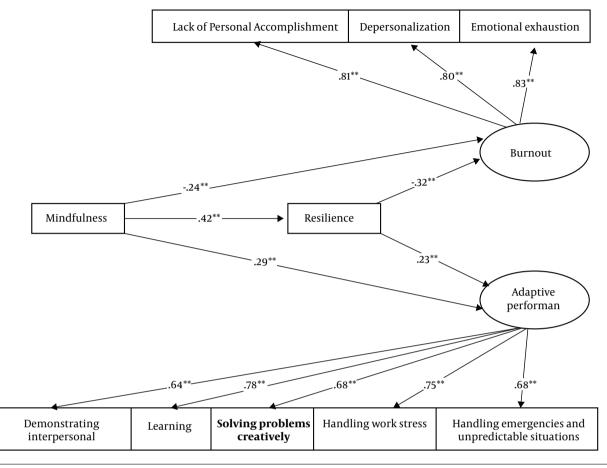


Figure 2. Standardized regression weights for the final model paths (** P < 0.001)

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