IPA
International Journal of Psychology
Vol. 15, No. 2, Summer & Fall 2021
PP. 243-269

Iranian **P**sychological
Association

The Effect of Mindfulness Training on Work-life Balance and Safety Behaviors of Employees of an Industrial Company in Ahvaz

Article Type: *Research Article*

Sima Parizadeh, PhD student *
Department of Industrial & Organizational Psychology, Faculty of Educational Sciences & Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran
simaparizade91@gmail.com

Kioumars Beshlideh, PhD
Department of Industrial & Organizational Psychology, Faculty of Educational Sciences & Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Nasrin Arshadi, PhD
Department of industrial & organizational psychology, Faculty of Educational Sciences & Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Bahram Peymannia, PhD
Department of Psychology, Faculty of Educational Sciences & Psychology, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Received: 1/ 5/ 2023 Revised: 19/8/ 2023 Accepted: 20/9/ 2023
Doi: 20.1001.1.20081251.2021.15.2.8.9

The present study was conducted with the aim of determining the effect of mindfulness training on work-life balance and safety behaviors in an industrial company in Ahvaz. This research was a quasi-experimental study with a pretest-posttest design with a control group. The participants consisted of 40 employees who were selected through convenience sampling method; they were randomly assigned into the experimental and the control groups. The instruments included Work-life Balance questionnaire (Wong & Ko, 2009) and Safe Behaviors questionnaire (Saleh, 2010), which were administered to both groups in the pretest and posttest phases. The experimental group received the training intervention of mindfulness based on Cullen and Brito Pons's (2015) model during eight 90-minute sessions. While the control group received no intervention. The data were analyzed by analysis of covariance using SPSS software (version 24). The results showed that mindfulness training

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

led to an increase in work-life balance and safety behaviors in the experimental group compared to the control group. According to the obtained results, it was suggested that managers hold a mindfulness program and increase work-life balance, safety behaviors, and the psychological well-being of employees. Thus, long-term benefits to the entire organization and employees can be obtained.

Keywords: mindfulness, work-life balance, safety behaviors

In recent years, factors such as advancement of technology, introduction of new tools and equipment, application of complex processes at higher temperatures and pressures, and the wear and tear of old facilities have caused an increase in occupational accidents in oil-related industries. Occupational accidents are among the important obstacles in production and productivity. They are also one of the most serious factors which threaten the health of employees, society, environment, and economy (Comberti, Demichela & Baldissone, 2018). Therefore, in these industries, the prevention of occupational accidents has become a fundamental and important issue in promoting occupational safety and health. In Iran, occupational accidents and injuries in the workplace rank second in terms of the cause of disability and death of employees, and rank third in the world (Izadi, Aminian & Esmaeili, 2019). In addition, the International Labor Organization estimated that the cost of injuries, diseases, and accidents in the workplace was about 4% of the gross national product (Alali, Braeckman, Van Hecke & Abdel Wahab, 2018).

In 2019, information from the International Labor Organization showed that 380,000 workers died each year due to occupational accidents, and 374 million workers were injured by non-fatal occupational accidents (Trillo Cabello, Martínez-Rojas, Carrillo-Castrillo, & Rubio-Romero, 2021; Ma, Lusk, Tan, Parke, Alhumaidi & Clark, 2022; Oh, Son & Lee, 2022). By reducing

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

occupational accidents, safe work is created for employees, which saves time, increases productivity and efficiency, improves services, health and well-being of employees. In addition, by reducing occupational accidents and injuries, compensation payments to employees paid by employers are reduced, and there is no need for employees to waste time and energy to recieve compensation (Ensslin, Gonçalves, Ensslin, Dutra, & Longaray, 2022). There are various factors which can greatly reduce the number of occupational injuries and accidents. Among these factors are work-life balance and safety behaviors.

Work-life balance refers to evaluating employees' abilities to effectively manage their main duties in personal, family, and professional roles. Work-life balance is more about spending time on family than personal issues (Le, Newman, Menzies, Zheng & Fermelis, 2020). Work-life balance is not specific to work or non-work environment; it is the result of a cognitive evaluation of the number of unfulfilled demands of each sector (Irawanto, Novianti & Roz, 2021). Having a work-life balance has many benefits. For instance, participation in multiple roles supports employees against the effects of adverse experiences (Brough, Timms, Chan, Hawkes & Rasmussen, 2020). It was shown that a poor work-life balance caused an increase in occupational injuries and accidents, and musculoskeletal pain. Therefore, improving work-life balance may reduce the occurrence of occupational and automobile injuries and musculoskeletal pain among workers (An, Kim, Yoon, Woo, Cho, Kim & Jo, 2020). Other complications of work-life imbalance include the dominance of work over the family, reduction of life quality, negative effects on health, and reduction in performance quality (Shi & Wang, 2022).

Another important factor in preventing occupational injuries and accidents is creating and strengthening safety behaviors

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

among employees. Research showed that the main cause of more than 80% of pseudo-events, injuries, and accidents at work was the unsafe behaviors of employees, and 20% was due to unsafe conditions and other factors. It should be noted that unsafe behavior refers to disobeying instructions and safe work practices (Wang, Zhang, Deng, Su & Gao, 2022).

Considering the adverse consequences of work-life imbalance and failure to perform safety behaviors for employees, their families, safety and health of the work environment, and the organization's productivity, it is very important to have the aforementioned variables in high quality and proper conditions.

One of the interventions which can lead to an increase in people's psychological capabilities, work-life balance and safety behaviors is mindfulness (Yousofi, Bakhtiarpour, Makvandi & Naderi, 2020). Mindfulness is one of the new interventions known as third-generation cognitive-behavioral therapy which can be effective in employees' psychological issues (Bostock, Crosswell, Prather & Steptoe, 2019). Mindfulness is the inner awareness in which an individual is aware of his actions and thoughts at the moment (Yang, Liu, Zhang & Liu, 2015). Mindfulness is based on three components, including avoiding judgment, increasing awareness, and being in the present. It helps people to analyze their behavioral, cognitive, and physiological activities (Komarati, Zangeneh Motlagh & Pirani, 2021). Moment-to-moment awareness of physical states, emotions, and thoughts can help people learn to control themselves and to get rid of spontaneous thoughts (Nejati, Zahiroddin, Afrookhteh, Rahmani & Hoveida, 2015). Based on the results of some studies, mindfulness is very influential in creating work-life balance (Althammer, Reis, Beek, Beck & Michel, 2021; Shekhawat,

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

Arora & Sethi, 2022). The results of a study showed that mindfulness increased self-regulation skills; in this way, employees could focus on a specific issue. Especially, when the demand was high in other roles and fields. in fact, this issue increased effectiveness in the field of work and life (Allen, Eby, Conley, Williamson, Mancini & Mitchell, 2015). According to the emotion regulation mechanism, people who have mindfulness should be more satisfied with their work and life roles and have less negative emotions. This mechanism facilitates the management of work and life boundaries; an individual can determine a specific boundary with another role by regulating the emotions which exist in one role. Basically, mindfulness provides an individual with the ability to distance himself from negative and undesirable events in another role when he is performing in one role (Allen & Kiburz, 2012). The results of Althammer et al.'s (2021) study showed that mindfulness had positive effects on psychological detachment, emotional well-being, psychological work-family conflict, and satisfaction with work-life balance.

In addition, some studies showed that mindfulness increased safety behaviors (Zhang & Wu, 2014; Nolan, 2017; Kao, Thomas, Spitzmueller & Huang, 2021; Renecle, Curcuruto, Gracia & Marcoa, 2021; Sin, 2022). Research on mindfulness showed that mindfulness could influence attention and motivation. Particularly, it could enable employees to effectively regulate their thoughts, feelings, and behaviors. Mindfulness is associated with increased awareness of attention as well as automatic and voluntary regulation of a behavior (Liang, Shi, Yang & Lio, 2022). Research has shown that knowledgeable people tend to make more accurate judgments, show high problem solving abilities and have high work performance. Herndon (2008) showed that mindfulness was associated with reduced cognitive failure (e.g., distraction, neglect, and inattention), which

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

ultimately led to higher work performance and fewer occupational accidents (Nolan, 2017). Thus, mindfulness is likely to be directly related to the reduction of occupational accidents by increasing the accuracy of risk perception and risk avoidance (Zhang & Wu, 2014).

Considering the fact that people spend most of their time in work environments, they should have the necessary job skills to prevent the occurrence of job problems which affect their lives. Due to the importance of safety issues in oil-related industries, including gas companies, which are one of Iran's most important industries, in this research study, attention was paid to the variables which according to the literature could reduce occupational injuries, accidents, and other organizational problems. In the present study, the use of the experimental group clarified whether such a training program had positive effects on work-life balance and safety behaviors. The current research study tried to fill the gaps in the literature. Therefore, it went further past correlational research studies, and it led to a better understanding of the causal relationship between mindfulness and the dependent variables of this research. Many studies have been conducted inside and outside Iran on work-life balance (Althammer, Reis, Beek, Beck & Michel 2021; Shekhawat, Arora & Sethi, 2022) and safety behaviors (Zhang & Wu, 2014; Nolan, 2017; Kao, Thomas, Spitzmueller & Huang, 2021; Renecle, Curcuruto, Gracia & Marcoa, 2021; Sin, 2022). However, no research study has been conducted in Iran which examines the effect of mindfulness training on these two variables. Finally, this study tried to find out if mindfulness training had a significant effect on work-life balance and safety behaviors.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

Method

The current study was applied in terms of purpose and quasi-experimental in nature with a pretest-posttest design with a control group. The statistical population included all employees of an industrial company in Ahvaz in 2022 (i.e., 800 individuals). From among the statistical population, 40 individuals were selected through convenience sampling method. They were assigned into two groups of mindfulness training and control group. The inclusion criteria were: 1- expressing the desire and informed consent to participate in the research study, 2- not receiving any intervention or training other than the intervention of the present study, 3-having a minimum work-life balance score (less than 39), 4- having at least a diploma education, 5- having a work experience of more than two years, 6- having regular participation in training sessions. The exclusion criteria were: 1- being absent for more than one sessions during the training, 2- creating physical problems which affect people's moods, and 3- having problems such as bereavement and changing job category.

The demographic characteristics of the participants in this research such as age, service history, level of education, & marital status are reported in Tables 1 to 4, respectively.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

Table 1
Frequency Table, Frequency Percentage, Mean and Standard Deviation of Age of the Participants

Age range	Mindfulness training		Control group		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
21-30	5	25	5	25	10	25
31-40	9	45	6	25	15	37.5
41-50	4	20	6	35	10	25
51-60	2	10	3	15	5	12.5
Sum	20	100	20	100	40	100
Mean	37		39		38.63	
S.D.	6.14		6.45		6.69	

Table 2
The Frequency and Percentage of Service History of the Participants

Years of service	Mindfulness training		control		total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
2-5	1	5	3	15	4	10
6-9	2	10	3	15	5	12.5
10-13	2	10	4	20	6	15
14-17	6	30	5	25	11	27.5
18-21	5	25	1	5	6	15
22-25	1	5	2	10	3	7.5
26-29	2	10	1	5	3	7.5
Above 30 years	1	5	1	5	2	5
Sum	20	100	20	100	40	100

[Downloaded from ijpb.ir on 2026-11-17]
[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

Mean	15.525	12.525	13.07
standard deviation	9.740	7.72	7.35

Table 3

Frequency and percentage of educational level of the participants

Grade	**Mindfulness training**		**control**		**total**	
	Frequency	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Diploma	4	20	4	20	8	20
Associate	7	35	6	30	13	32.5
Bachelor	7	35	7	35	14	35
Master and higher	2	10	3	15	5	12.5
Sum	20	100	20	100	40	100

Table 4

Frequency and frequency percentage of the marital status of the participants

Group	marital status	Frequency	Percentage of Frequency	Sum
Mindfulness training	Single	9	45	20
	married	11	55	
Control	Single	5	25	20
	married	15	75	
Total	Single	14	35	40
	married	26	65	

After selecting the participants, a pretest was administered to them. Then, the experimental group received educational intervention during eight 90-minute sessions; however, the control group did not receive any intervention. After the completion of the training course, a posttest was administered to

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

both groups. After collecting the data, the data were analyzed at two levels of descriptive and inferential statistics. From the indicators of central tendency and dispersion, mean and standard deviation were used to provide descriptive information. At the level of inferential statistics, Cronbach's alpha coefficients and Spearman-Brown's bisection method were used to check the reliability of the instruments, the confirmatory factor analysis method was used to measure their validity, and Multivariable Analysis of Covariance (MANCOVA) was used to check the experimental effects. SPSS-24 (Statistical Package for the Social Sciences) and Amos-24 (Analysis of Moments Structures) software were used to analyze the research data.

Instruments

Work-Life Balance Questionnaire

The current research study used a 26-item questionnaire on work-life balance developed by Wong and Ko (2009). Each item was rated using a 5-point Likert scale from 1 (completely disagree) to 5 (completely agree). Two examples of the items in this questionnaire are "I have enough time to sleep" and "I feel energetic after work" (Javadi Nodeh, 2020). In the scoring of this questionnaire, 80-100 is very high, 79-60 is high, 59-40 is relatively low, 39-20 is low, and less than 20 is very low (Wong & Ko, 2009).

Validity and reliability of Work-life Balance questionnaire

In the present study, confirmatory factor analysis was used to measure the construct validity of the Work-life Balance questionnaire. The fit statistics related to this model ($X^2 = 50.476$, X2/df = 1.58, CFI = .94, IFI = .94, RMSEA = .09) showed that

[Downloaded from ijpb.ir on 2026-11-17]
[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

this questionnaire had a good fit. Spearman-Brown and Cronbach's alpha methods were also used to check the reliability of this scale. They turned out to be as .86 and .89, respectively.

Safe Behaviors Scale

In this research study, the 11-item Safety Behavior scale was used to investigate the safety behaviors of employees. The responses of the participants were shown through a 5-point Likert scale from 1 (completely disagree) to 5 (completely agree) (Saleh, 2010). Two examples of the items in this questionnaire are "I use the correct safety methods to do my job" and "I try to improve the safety policies or methods in my job".

Validity and reliability of Safe Behaviors Scale

Confirmatory factor analysis was used to check the validity of this scale. The indicators of the confirmatory factor analysis model showed that the values of the indicators were close to the fit criteria and the confirmatory factor analysis model had an acceptable fit. Spearman-Brown and Cronbach's alpha methods were also used to check the reliability of this scale, which were obtained as .87 and .89, respectively.

Mindfulness-Based Emotional Balance (MBEB) training intervention

In the present study, the training program designed by Cullen and Brito Pons in 2015 was used. This training intervention was held during eight 90-minute sessions during eight weeks. The summary of the Mindfulness-Based Emotional Balance (MBEB) training program sessions is presented in Table 5.

Table 5

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

Summary of Training Sessions on Emotional Balance Based on Mindfulness Cullen and Brito Pons (2015)

session	goals	content & assignments
1	The Body Scan	Directing attention to daily activities and body with states of presence of mind
2	Breath Awareness and Mindfulness of Feelings	Calming the mind through breathing awareness and paying attention to feelings that arise in a non-judgmental way.
3	Breath Awareness and Awareness of Thoughts	Retraining the body and breathing and encouraging people to be aware of the thoughts that arise in them.
4	Forgiveness	Examining the factors that make it difficult to forgive, Liberation through self-forgiveness and self-forgiveness meditation
5	Mindfulness of Breath, Thoughts, and Mental States	Begin the session with awareness of breathing and expanding the field of awareness to thoughts and feelings And then adding instructions to bring awareness to moods and emotions
6	Kindness	Discussion about the benefits of kindness and its effect on the body, mind and relationships with others and bringing feelings of love and kindness into daily interactions

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

7	Mindfulness of Breath, Thoughts, and Mental States	Revisiting the exercises of session five And how to continue it for life
8	Compassion	Explaining the concept of self-compassion, methods of increasing self-compassion, Offering practice and meditation of love and Love with a focus on self-compassion

Validation of the Mindfulness-Based Emotional Balance (MBEB) training program

To check the validity of the training program, a five-item questionnaire was prepared regarding the accuracy of the training program in the form of yes/no questions. Moreover, two evaluators checked the questions of the questionnaire. Then, the coefficient of agreement between the answers of the two evaluators was calculated, and its value was .843.

Result

The sample of the present study included 40 participants, whose mean and standard deviation of their age in the experimental group were 37 and 6.14, respectively. Furthermore, the mean and standard deviation of the age of the participants in the control group were 39 and 6.45, respectively. In addition, the mean and standard deviation of the service history of the participants in the experimental group were 15.525 and 9.740, respectively, and the mean and standard deviation of the service history of the participants in the control group were 12.525 and 7.72, respectively. In both groups, the participants with a bachelor's degree had the highest frequency, and the participants with a master's degree or higher had the lowest frequency. There were

[Downloaded from ijpb.ir on 2026-11-17]
[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

also nine single participants (45%) and 11 married participants (55%) in the mindfulness training group, and five single participants (25%) and 15 married participants (75%) in the control group.

Table 6 shows the mean and standard deviation of work-life balance and safety behavior scores of the two experimental and control groups in the pretest and posttest phases.

Table 6

Descriptive indicators of work-life balance and safe behaviors in the pre-test and post-test of the experimental and control groups

Variables	Experimental group				Control group			
	Pre-test		Post-test		Pre-test		Post-test	
	M	SD	M	SD	M	SD	M	SD
Work-life balance	81.39	6.14	95.63	6.17	72.47	6.51	73.86	6.39
Safe behaviors	32.56	7.61	48.80	7.73	34.09	7.64	32.91	7.59

As it is evident in Table 6, in the variable of work-life balance and safety behaviors, the mean of the experimental group in the posttest was higher than that of the control group.

Covariance analysis has several main assumptions. Thus, these assumptions must be checked and verified to use this test. These assumptions include normality, homogeneity of the covariance matrix, homogeneity of variances, and homogeneity of regression slopes. Box test was not significant for variables of work-life balance ($p = .71$, $F = .73$, Box = 92.04) and safety behaviors ($p = .45$, $F = .88$, Box = 93.25). Hence, it can be said that the condition of homogeneity of the covariance matrix was properly met. Levine's test was also not significant for work-life balance ($p =$

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

.78) and safety behaviors (p = .59). As a result, the condition of equality of inter-group variances was also met. The F value of the interaction of pretests and posttests at the factor levels in the variables of work-life balance and safety behaviors was not significant at the .01 level. Therefore, the assumption of regression homogeneity was established. Considering the fact that the assumptions of using the analysis of covariance test were properly met, the analysis of covariance was applicable.

In Table 7, the general results of Multivariable Analysis of Covariance are reported.

Table 7

General results of Multivariable Analysis of Covariance

Test	Value	F	Df of hypotheses	Df error	Sig	Effect size
Pillai's Trace	.817	20.27	2	37	.001	.76
Wilks' Lambda	.061	20.27	2	37	.001	.76
Hotelling's Trace	13.09	20.27	2	37	.001	.76
Roy's Largest Root	13.45	20.27	2	37	.001	.76

The results listed in Table 7 show that the difference between the two groups is 76%; That is, 76% of the variance or difference between the two groups is related to the effects of mindfulness training.

In order to compare the groups in terms of each dependent variable, Univariate Analysis of Covariance was used in the MANCOVA text, and the results of this analysis are presented in Table 8.

Table 8

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

Results of Univariate Analysis of Covariance for Work-Life Balance Variable

Sources of changes	Sum of squares	Df	Mean square	F	Sig	Eta coefficients
Pre-test effect	47322.353	1	47322.353	1709.306	.01	.936
(Experimental/ Control) Group	241.411	1	214.411	8.177	.01	.386
Error	730.160	38	27.183			
Total	48904.000	40				

According to the results presented in Table 8, because F = 8.177 with 1 and 38 degrees of freedom was significant at the .05 level. This means that mindfulness training had an effect on work-life balance, and the effect of mindfulness training was about 39% according to the eta coefficients obtained.

Table 9

Results of Univariate Analysis of Covariance for Safe Behaviors Variable

Sources of changes	Sum of squares	Df	Mean square	F	Sig	Eta coefficients
Pre-test effect	116954.630	1	116954.630	12063.20	.02	.983
(Experimental/ Control) Group	214.411	1	214.411	22.470	.01	.462
Error	273.940	38	10.342			
Total	117883.000	40				

According to the results listed in Table 9, since F=22.470 with 1 and 38 degrees of freedom was significant at the 0.05 level, the

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

null hypothesis was rejected and the research hypothesis was confirmed with 95% confidence. This means that mindfulness training had an effect on safety behaviors, and the effect of mindfulness training was about 46%, considering the eta coefficients.

Discussion

The present study was conducted with the aim of examining the effect of mindfulness training on work-life balance and safety behaviors of workers of an industrial company in Ahvaz. The results of the analysis of covariance showed that there was a significant difference between the work-life balance and the safety behaviors of the experimental and control groups in the posttest stage. Therefore, it can be concluded that mindfulness training leads to an increase in work-life balance and safety behaviors.

The results of this research study showed that the work-life balance score of the employees who received the mindfulness training program increased compared to the control group in the posttest. This finding is in line to the results of Althamer et al. (2021) and Shekhawat et al.'s (2022) studies.

In explaining this finding, it can be said that employees who manage work roles and personal life at the same time are faced with different choices every day; they require spending a lot of energy and time. In order to know how, where and when they should allocate their energy and time in different roles and parts of work and life, they must constantly make decisions in the moment. Mindfulness makes it easy to decide when the best time to engage in work is. It also provides the necessary attention and concentration while doing work. Thus, it improves the quality of performance in work and life. When a person is able to properly divide his energy and time resources between work and personal

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

life roles, he will be more effective and efficient, and as a result, the work-life balance will also be improved. The reason is that mindfulness leads to self-regulation and directs attention to what is being done at the moment. Thus, mindfulness helps people to better manage their responsibilities in different roles. In other words, mindfulness can lead to an increase in work-life balance through being in the moment, controlling and managing attention, and as a result, reducing distractions. When a person has full and simultaneous attention to different roles, he will face much fewer problems in managing his roles. Therefore, those who have mindfulness will act much more efficiently in their work and personal life roles and will have a more favorable and accurate assessment of the balance between work and life roles. Mindfulness is a way to facilitate managing the boundaries of work and life so that a person can create a certain boundary with other roles by regulating the emotions he has in one role. Mindfulness helps people not to consider the adverse events of other roles while they are in one role. In other words, they ignore the problems of other roles in their minds and thoughts. Often, in order to fulfill the duties and roles of work and personal life, the feeling of lack of time will be a very important factor in losing the balance between work and life and creating a conflict between these two areas. It can be a helpful factor and makes people understand time better mentally. In other words, thinking in the present moment leads to the slower passage of time. Therefore, due to the fact that mindfulness makes the perceived lack of time much less, it can lead to a reduction in the conflict between work and life and ultimately can lead to an increase in work-life balance.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

Another finding of this research study was that the safety behavior scores of the employees who participated in the training courses increased compared to the control group in the posttest. This finding was consistent with the research results of Zhang and Wu (2014), Nolan (2017), Kao et al. (2021), Renecle et al. (2021), and Sin (2022).

To explain this finding, it can be stated that mindfulness, through its influence in control, attention, and stability of a person, leads to an increase in self-efficacy and self-regulation, which in turn affect his subsequent behaviors which are compatible with his values and needs. Self-determination theory provides a theoretical basis to confirm the claim that mindfulness is related to safety behaviors and occupational accidents. Based on this theory, mindfulness is effective and useful for promoting self-regulation and motivating safety behaviors, which ultimately reduce occupational injuries and accidents (Sin, 2022). When employees participate in safety issues (i.e., following safety rules and regulations and participating in safety measures) the probability of occupational injuries and accidents would also decrease. The results of research in the field of mindfulness showed that mindfulness affects people's attention to work at the moment (e.g., when they are working with a special device) and their motivation during work. In addition, mindfulness helps employees to effectively regulate their thoughts, emotions, and behaviors (Zhang & Wu, 2014; Nolan, 2017; Kao et al., 2021; Renecle et al., 2021; Sin, 2022). In other words, mindfulness is related to a behavior through the promotion of attention, awareness, and regulation of the will (Yakobi, Smilek & Danckert, 2021). People who have high concentration and alertness mainly have more problem-solving ability and better performance and judgments. Increasing attention and vigilance in people leads to a decrease in distraction and carelessness in them.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

As a result, the efficiency and safety behaviors at work increase, and occupational injuries and accidents decrease. Therefore, mindfulness leads to an increase in the accuracy of risk perception and risk prevention in people, which directly reduces occupational accidents. In general, it can be said that self-awareness and self-reflection in people enable them to know their values and needs, to match and to harmonize them with their behavior. If employees have little awareness, they are not aware of the events that happen at a moment or do not pay attention to them. Thus, they cannot behave in a purposeful way. Instead, these types of people show organizational behaviors such as unsafe behaviors, risky decisions, interpersonal conflicts and all kinds of deviations in the workplace. In general, the maximum amount of safety behaviors occurs in situations where employees are more alert, especially if the environment in which they work is secure in terms of safety conditions (Shi, 2021). In general, based on the results of the present research study, it can be said that mindfulness is a tool for empowering people in the organization. Employees can use mindfulness to improve performance and to increase organizational productivity. They can also promote safety behaviors. As a result, there would be fewer injuries and occupational accidents; they cause less damage to the organizations.

This research had some limitations. First, the statistical population was limited to male rank-and-file employees, which limited the possibility of generalizing the results of the research to other employees, including staff, women, and employees of other departments and organizations. Second, in this research study, a self-assessment method was used for data collection

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]
[DOI: 10.66224/ijpb.15.2.243]

because due to internal issues, it was not possible to use other data collection methods such as observation and interview.

Future researchers are advised to replicate this study in other contexts so that the results obtained in the two studies can be compared. Furthermore, while paying attention to more diverse groups of employees in terms of gender and type of work schedule, researchers can conduct longitudinal studies so that they learn about the effect of the results over a long period of time. In addition, it is suggested that the moderating role of demographic variables in evaluating the effect of mindfulness on work-life balance and safety behaviors be investigated in future research studies.

In this research study, mindfulness training increased the work-life balance and safety behaviors. Therefore, it is suggested that managers and officials of institutions and organizations consider the effect of mindfulness on variables such as work-life balance and safety behaviors, and pay more attention to the benefits and role of mindfulness than the past. Therefore, they can hold courses based on intervention patterns in work environments. In addition, the organization should support and encourage its employees to perform mindfulness exercises. Employees can do mindfulness exercises not only at home, but also during breaks at work (i.e., in a short period of time, or even conscious, purposeful, and voluntary breathing exercises).

Acknowledgments

We would like to express our gratitude to the supervisors, advisors, and all the employees who participated and cooperated in this research.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

References

Alali, H., Braeckman, L., Van Hecke, T., & Abdel Wahab, M. (2018). Shift Work and Occupational Accident Absence in Belgium: Findings from the Sixth European Working Condition Survey. *International Journal of Environmental Research and Public Health*, *15*(9), 1- 13.

Allen, T. D., Eby, L. T., Conley, K. M., Williamson, R. L., Mancini, V. S., & Mitchell, M. E. (2015). What do we really know about the effects of mindfulness-based training in the workplace? *Industrial and Organizational Psychology*, *8*, 652–661.

Allen, T. D., & Kiburz, K. M. (2012). Trait mindfulness and work–family balance among working parents: The mediating effects of vitality and sleep quality. *Journal of Vocational Behavior*, *80*(2), 372–379.

Althammer, S. E., Reis, D., Beek, S., Beck, L., & Michel, A. (2021). A mindfulness intervention promoting work–life balance: How segmentation preference affects changes in detachment, well-being, and work–life balance. *Journal of Occupational and Organizational Psychology*, *94*(2), 282-308.

An, J. M., Kim, J., Yoon, S., Woo, K. H., Cho, S. Y., Kim, K., & Jo, H. R. (2020). Association of work–life balance with occupational injury and work-related musculoskeletal pain among Korean workers. *Annals of Occupational and Environmental Medicine*, *32*(20), 1- 14.

Bostock, S., Crosswell, A. D., Prather, A. A., & Steptoe, A. (2019). Mindfulness on-the-go: Effects of a mindfulness meditation app on work stress and well-being. *Journal of Occupational Health Psychology*, *24*(1), 127- 138.

Brough, P., Timms, C., Chan, X. W., Hawkes, A., & Rasmussen, L. (2020). *Work–Life Balance: Definitions, Causes, and Consequences.* In: Theorell, T. (eds) Handbook of Socioeconomic Determinants of Occupational Health. Handbook Series in Occupational Health Sciences. Springer, Cham.

Cin, T. Zh. (2022). *The Relationship Between Stress, Safety Behaviour and Mindfulness of Project Team Members*. Master of Project Management, Lee Kong Chian Faculty of Engineering and Science, Universiti Tunku Abdul Rahman.

Comberti, L., Demichela, M., & Baldissone, G. (2018). A combined approach for the analysis of large occupational accident databases to support accident-prevention decision making. *Safety Science*, *106*, 191- 202.

Cullen, M., & Brito Pons, G. (2015). *The Mindfulness-Based Emotional Balance Workbook: An Eight-Week Program for Improved Emotion Regulation and Resilience*. International Kindle Paperwhite: Illustrated, September 1, 2015.

Ensslin, L., Gonçalves, A., Ensslin, S. R., Dutra, A., & Longaray, A. A. (2022). Constructivist multi-criteria model to support the management of occupational accident risks in civil construction industry. *PLoS One*, *17*(6), 27- 43.

Irawanto, D. W., Novianti, K. R., & Roz, K. (2021). Work from Home: Measuring Satisfaction between Work–Life Balance and Work Stress during the COVID-19 Pandemic in Indonesia. *Economies*, *9*(3), 96- 110.

Izadi, N., Aminian, O., & Esmaeili, B. (2019). Occupational Accidents in Iran: Risk Factors and Long Term Trend (2007–2016). *Journal of Research in Health Sciences*, *19*(2), 93-113.

Javadi Nodeh, R. (2020). Investigating the relationship between work and life balance with job stress and the quality of work

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

life of administrative staff of secondary schools in one district of Ardabil. Master's thesis in educational management, Islamic Azad University, Ardabil branch (In Persian).

Kao, K. Y., Thomas, C. L., Spitzmueller, Ch., & Huang, Y. H. (2021). Being Present in Enhancing Safety: Examining the Effects of Workplace Mindfulness, Safety Behaviors, and Safety Climate on Safety Outcomes. *Journal of Business and Psychology*, *36*(2021), 1- 15.

Komarati, M., Zangeneh Motlagh, F., & Pirani, Z. (2021). Comparison of the Effectiveness Acceptance and Commitment Therapy (ACT) and Mindfulness-Based Cognitive Therapy on Distress Tolerance of Female Adolescents with Self-Injury Behaviors. *International Journal of Psychology (IPA), 15(1), 75-102 (In Persian).*

Le, H., Newman, A., Menzies, J., Zheng, C., & Fermelis, J. (2020). Work–life balance in Asia: A systematic review. *Human Resource Management Review*, *30*(4), 76- 100.

Liang, H., Shi, X., Yang, D., & Lio, K. (2022). Impact of mindfulness on construction workers' safety performance: The mediating roles of psychological contract and coping behaviors. *Safety Science*, *146*(2022), 27- 41.

Ma, Q., Lusk, J. W., Tan, F. H., Parke, M. E., Alhumaidi, H. M., & Clark, J. D. (2022). A Mathematical Modeling of Evaluating China's Construction Safety for Occupational Accident Analysis. *Applied Sciences*, *12*(10), 50- 59.

Nejati, S., Zahiroddin, A., Afrookhteh, G., Rahmani, S., & Hoveida, Sh. (2015). Effect of Group Mindfulness- Based Stress-Reduction Program and Conscious Yoga on Lifestyle, Coping Strategies, and Systolic and Diastolic Blood

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

Pressures in Patients with Hypertension. *The Journal of Tehran University Heart Center, 10*(3),140- 148.

Ning, H., Yu, Y., & Bai, L. (2022). Unsafe Behaviors Analysis of Sideswipe Collision on Urban Expressways Based on Bayesian Network. *Sustainability, 14*(13), 81- 95.

Nolan, C. (2017). *Safety mindfulness: the incorporation of low-dose mindfulness as a leading edge safety intervention a leading edge safety intervention.* The Degree Master of Science in Organization Development, A Research Project Presented to the Faculty of the George L. Graziadio School of Business and Management Pepperdine University.

Oh, H. R., Son, A. L., & Lee, Z. K. (2022). Occupational accident prediction modeling and analysis using SHAP. *Journal of Digital Contents Society, 22*(7), 1115- 1123.

Renecle, M., Curcuruto, M., Gracia, F., & Marcoa, T. (2021). Enhancing safety in high-risk operations: A multilevel analysis of the role of mindful organising in translating safety climate into individual safety behaviours. *Safety Science, 138,* 105- 134.

Rosa, R. (2022). The trouble with 'work–life balance' in neoliberal academia: a systematic and critical review. *Journal of Gender Studies*, *31*(1), 55-73.

Salleh, A. (2010). *Safety behavior in the Malaysian petrochemical industry.* A Doctoral Dissertation, University of Utara Malaysia.

Shekhawat, Kh., Arora, K., & Sethi, S. (2022). Mindfulness for Work-Life Balance of Employees During Covid 19: A Review Study. *EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal*, *8*(2), 37- 41.

Shi, H. (2021). The Influence of Safety-Specific Transformational Leadership and High-Quality

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

Relationships on Mindful Safety Practices Through Safety Climate: A Study in Chinese Petroleum Industry. *Journal of Applied Security Research, 16*(3), 328-344.

Shi, X. C., & Wang, X. (2022). Daily spillover from home to work: the role of workplace mindfulness and daily customer mistreatment. *International Journal of Contemporary Hospitality Management, 34*(8), 3008- 3028.

Trillo Cabello, A., Martínez-Rojas, M., Carrillo-Castrillo, J. A., & Rubio-Romero, J. C. (2021). Occupational accident analysis according to professionals of different construction phases using association rules. *Safety Science, 144*, 105- 118.

Wang, X., Zhang, C., Deng, J., Su, C., & Gao, Z. (2022). Analysis of Factors Influencing Miners' Unsafe Behaviors in Intelligent Mines using a Novel Hybrid MCDM Model. *International Journal of Environmental Research and Public Health*, *19*(12), 78- 73.

Wong, S. C., & Ko, A. (2009). Exploratory study of understanding hotel employees' perception on work- life balance issues. *International Journal of Hospitality Management*, *28*(2), 195- 203.

Yakobi, O., Smilek, D., & Danckert, j. (2021). The Effects of Mindfulness Meditation on Attention, Executive Control and Working Memory in Healthy Adults: A Meta-analysis of Randomized Controlled Trials. *Cognitive Therapy and Research*, *45*(2021), 543- 560.

Yang, Y., Liu, Y. H., Zhang, H. F., & Liu, J. Y. (2015). Effectiveness of mindfulness-based stress reduction and mindfulness-based cognitive therapies on people living with HIV: A systematic review and meta-analysis. *International Journal of Nursing Sciences, 2*(3), 283- 294.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]

Yousofi, F., Bakhtiarpour, S., Makvandi, B., & Naderi, F. (2020). The Causal Relationship between Mental Strength and Mindfulness with Marital Satisfaction through Parental Stress. *International Journal of Psychology (IPA), 14*(2), 132-157 (In Persian).

Zhang, J., & Wu, Ch. (2014). The influence of dispositional mindfulness on safety behaviors: A dual process perspective. *Accident Analysis & Prevention*, *70*, 24- 32.

[Downloaded from ijpb.ir on 2026-11-17]

[DOR: 20.1001.1.20081251.2021.15.2.8.9]

[DOI: 10.66224/ijpb.15.2.243]