

# Effects of Mindful Breathing Techniques on Work-Related Stress

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## Abstract

Work-related stress is a widespread problem among young adults, frequently intensified by job insecurity and the challenges of managing personal and work obligations. This study assesses the efficacy of three mindfulness breathing techniques, diaphragmatic breathing, box breathing, and alternate nostril breathing, in reducing stress levels among young, employed individuals aged 18 to 35. The study was carried out in the Klang Valley region of Malaysia. It utilized a quantitative approach and employed structured online questionnaires that were distributed to 390 participants. The data was analyzed using SPSS, which involved the use of descriptive statistics, paired t-tests, and Spearman's rank correlation. The results suggest that both box breathing and alternative nostril breathing have a considerable impact on reducing stress levels. Furthermore, there is a strong negative relationship between the frequency of practicing these techniques and the amount of stress reduction experienced. The study found that box breathing resulted in a mean stress reduction difference of 0.448 ( $t = 5.436, p < 0.001$ ), whereas alternate nostril breathing had a mean difference of 0.383 ( $t = 4.999, p < 0.001$ ). Diaphragmatic breathing yielded inconsistent outcomes, with an average deviation of 0.110 ( $t = 1.685, p > 0.05$ ) and a moderate inverse correlation. This indicates that the effectiveness of diaphragmatic breathing varies depending on an individual's skill level and period of practice. This study emphasizes the potential of mindfulness breathing methods as non-pharmacological therapies for effectively controlling work-related stress. It emphasizes the significance of integrating these methods into workplace wellness initiatives to improve employee welfare and efficiency. The study's constraints, such as the use of self-reported data and convenience sampling, indicate areas for future investigation, highlighting the importance of longitudinal studies and diverse participant populations to examine the lasting advantages and wider relevance of these interventions.

**Keywords:** Mindfulness, Breathing Techniques, Stress, Young Adults, Stress Management

## Introduction

Work-related stress is increasingly prevalent among young adults in modern workplaces. The World Health Organization (WHO) defines work-related stress as the response individuals experience when job demands exceed their knowledge and abilities, challenging their

capacity to cope. Young adults, typically aged 18–35, face unique stressors such as career progression, job security, and work–life balance, which can adversely affect mental and physical health (WHO, 2020).

Mindfulness-based interventions have gained recognition as effective strategies for stress reduction. Mindfulness emphasizes present-moment awareness of thoughts, emotions, and bodily sensations with openness and acceptance. Evidence suggests that mindfulness practices can alleviate stress and enhance well-being (Kabat-Zinn, 1990). Among these, breathing techniques are particularly valued for their simplicity and accessibility.

Diaphragmatic breathing promotes relaxation by engaging the diaphragm for efficient air intake, reducing cortisol levels, and activating the parasympathetic nervous system (Ma et al., 2017). Box breathing, a structured cycle of inhalation, breath-holding, exhalation, and pause, has been shown to improve emotional regulation and reduce anxiety (Saoji, Raghavendra, & Manjunath, 2019). Alternate nostril breathing, rooted in yoga and Ayurveda, is associated with nervous system balance and cardiovascular benefits (Telles, Singh, & Balkrishna, 2016).

Despite these documented benefits, comparative evidence on the effectiveness of these techniques in reducing work-related stress among young adults remains scarce. This study addresses this gap by systematically comparing diaphragmatic breathing, box breathing, and alternate nostril breathing in mitigating work-related stress.

#### *Problem Statement*

Work-related stress among young adults has become a pressing concern in contemporary occupational settings, particularly in urban regions like Malaysia's Klang Valley. This demographic, aged 18 to 35, is navigating a transitional phase marked by career establishment, financial instability, and evolving personal responsibilities. These stressors are compounded by high expectations for performance, limited job security, and the struggle to maintain a healthy work-life balance. Despite the growing popularity of mindfulness practices, existing literature offers limited insight into how different breathing techniques compare in their effectiveness for stress reduction within this specific population.

Previous studies have examined individual techniques such as diaphragmatic breathing and box breathing, but these investigations often suffer from methodological limitations, including small sample sizes, lack of control groups, and short-term assessments. Moreover, alternate nostril breathing, although rooted in traditional practices and supported by anecdotal evidence, has not been rigorously evaluated in occupational stress contexts. The absence of comparative studies that assess these techniques simultaneously within a consistent framework leaves a critical gap in both academic understanding and practical application.

This study addresses these limitations by systematically comparing the effectiveness of diaphragmatic breathing, box breathing, and alternate nostril breathing in reducing work-related stress among young adults. By focusing on a population that is particularly vulnerable to occupational stress and employing a robust quantitative methodology, the research aims to provide actionable insights for both mental health practitioners and organizational wellness programs.

### *Research Objective*

- i. To assess the effectiveness of diaphragmatic breathing in reducing work-related stress among young adults.
- ii. To evaluate the impact of box breathing on stress levels in young professionals.
- iii. To determine the efficacy of alternate nostril breathing in mitigating occupational stress.

### *Research Questions*

- i. How to assess the effectiveness of diaphragmatic breathing in reducing work-related stress among young adults.
- ii. How to evaluate the impact of box breathing on stress levels in young professionals.
- iii. How to determine the efficacy of alternate nostril breathing in mitigating occupational stress.

### **Literature Review**

This part presents literature reviews that are related to research. Mindfulness, defined as the practice of maintaining a non-judgmental awareness of the present moment, has gained significant attention in psychological and occupational health research since the early 2000s. Among the various mindfulness-based interventions, breathing techniques have emerged as particularly accessible and effective tools for stress reduction. These techniques are grounded in well-established psychological theories such as Cognitive Behavioral Theory (CBT), Self-Determination Theory (SDT), and the Job Demands-Resources (JD-R) Model. CBT posits that maladaptive thought patterns contribute to emotional distress and behavioral issues, and mindfulness practices, including breathing techniques, help individuals observe their thoughts without judgment, thereby reducing cognitive distortions. SDT emphasizes the fulfillment of basic psychological needs—autonomy, competence, and relatedness—for optimal functioning and well-being. Breathing techniques support these needs by promoting self-regulation and emotional stability. The JD-R Model explains how job demands and resources influence employee stress and motivation, and mindfulness breathing techniques can serve as personal resources that enhance resilience and coping capacity.

Empirical studies have consistently demonstrated the efficacy of various breathing techniques. Diaphragmatic breathing, which activates the parasympathetic nervous system, has been shown to reduce cortisol levels and improve emotional regulation (Ma et al., 2017). Wu et al. (2024) found that diaphragmatic breathing significantly increased diaphragmatic excursion and core muscle activation, contributing to improved stress regulation. Box breathing, a structured technique involving equal phases of inhalation, breath-holding, exhalation, and holding again, has been associated with enhanced focus and reduced anxiety (Saoji et al., 2019). Bentley et al. (2023) emphasized that box breathing, when practiced for more than five minutes with guided instruction, consistently reduced anxiety and stress. Alternate nostril breathing, rooted in yogic traditions, is believed to balance the autonomic nervous system and improve cardiovascular function. Epe et al. (2021) demonstrated that alternate nostril breathing significantly improved mindfulness and reduced stress in controlled trials.

A meta-analysis by Fincham et al. (2022) revealed that breathwork interventions, including the above techniques, were associated with a small-to-moderate reduction in self-reported stress ( $g = -0.35$ ,  $p < 0.001$ ). Strauss et al. (2023) found that slow-paced breathing practices

enhanced heart rate variability and parasympathetic activation, which are key indicators of emotional resilience. In workplace settings, Mindfulness-Based Stress Reduction (MBSR) programs incorporating breathing techniques have shown promising results. Michaelsen et al. (2023) synthesized 91 randomized controlled trials and concluded that MBSR significantly improved mental health, well-being, and work-related outcomes. Hilton et al. (2017) mapped evidence from 175 systematic reviews, confirming the effectiveness of mindfulness meditation and breathing practices in occupational health.

Despite these promising findings, comparative studies evaluating the relative effectiveness of diaphragmatic, box, and alternate nostril breathing within the same population remain scarce. Most existing research focuses on individual techniques in isolation, often with limited generalizability. Furthermore, few studies have specifically targeted young adults in high-stress work environments—a demographic particularly susceptible to occupational stress due to transitional life stages and career pressures. This study addresses these gaps by systematically comparing the effects of diaphragmatic breathing, box breathing, and alternate nostril breathing on work-related stress among young adults in Malaysia.

### *Hypothesis*

H1: Diaphragmatic breathing will significantly reduce work-related stress among young adults.

H2: Box breathing will be effective in lowering work-related stress in young professionals.

H3: Alternate nostril breathing will lead to a significant reduction in work-related stress among young adults.

### **Methodology**

#### *Research Design*

This study employed a quantitative, cross-sectional research design to investigate the comparative effectiveness of three mindfulness breathing techniques, diaphragmatic breathing, box breathing, and alternate nostril breathing in reducing work-related stress among young adults. The cross-sectional approach was chosen to capture a snapshot of stress levels and breathing technique usage within a defined population at a single point in time, allowing for efficient data collection and analysis. This design is particularly suitable for behavioral and psychological studies where the goal is to identify associations and differences between groups without manipulating variables. The study utilized structured online questionnaires to gather data from participants aged 18 to 35 residing in Klang Valley, Malaysia. The questionnaire was designed to measure perceived stress levels before and after the application of each breathing technique, as well as the frequency and duration of practice. By employing standardized instruments and statistical analysis methods, the research design ensured reliability and validity in assessing the impact of each technique. The use of a cross-sectional design also facilitated the comparison of outcomes across different breathing practices within the same demographic context, providing a robust framework for evaluating their relative effectiveness.

#### *Location of Study*

To conduct the research, mainly the targeted population is very crucial for the data collection process to be carried out. A population is a collection of people that are being studied and are classified based on similar and consistent features. The population targeted for this study

is the Klang Valley region, encompassing Kuala Lumpur and its surrounding urban areas, was selected due to its high concentration of young working adults and diverse occupational sectors. This location offers a representative sample of Malaysia's urban workforce, where stress-related issues are prevalent due to fast-paced work environments, long commuting hours, and competitive job markets. The cultural diversity and economic dynamics of Klang Valley also provide a meaningful context for evaluating the applicability of mindfulness-based interventions across different backgrounds and employment settings

### *Sampling Technique*

This study utilized convenience sampling, a non-probability technique where participants are selected based on their accessibility and willingness to participate. This method was chosen for its practicality, enabling rapid and cost-effective data collection, which is particularly beneficial in exploratory research aimed at gaining initial insights rather than making broad generalizations. Participants were recruited through various digital channels, including social media, academic networks, and online forums, to ensure a diverse pool of young adults experiencing work-related stress and interested in mindfulness interventions. While convenience sampling offers efficiency, it also introduces potential selection bias, as the sample may not fully represent the broader population. Individuals more familiar with or inclined toward mindfulness practices may be overrepresented, potentially influencing the study's outcomes. To mitigate this, efforts were made to recruit from varied sources and collect demographic data to monitor sample diversity across age, gender, education, and employment status. Despite its limitations, convenience sampling was deemed appropriate for the exploratory nature of this study, providing foundational data to inform future research using more rigorous sampling methods.

### *Data Gathering Procedure*

Data collection for this study was conducted through structured online surveys using Google Forms, selected for its efficiency in reaching a broad and diverse sample and its ease of data management. The questionnaire was divided into three sections: demographic information and prior experience with breathing techniques; stress assessment using the Perceived Stress Scale (PSS); and breathing technique practice, which included questions on frequency, consistency, and perceived effectiveness of diaphragmatic, box, and alternate nostril breathing. To ensure clarity and accessibility, the survey featured concise instructions and was optimized for various devices, including smartphones, tablets, and desktops. A pilot test involving 10 participants like the target population was conducted to refine the questionnaire based on quantitative feedback, improving clarity and identifying technical issues. To enhance response rates, participants received reminders and follow-up emails throughout the study period, ensuring robust engagement and reliable data collection.

### *Instrument of Study*

In this research, questionnaires have been identified as the best instruments to collect data from the specified sample and population with the research design. The study employed a structured online questionnaire to collect data efficiently and inclusively. Key components of the questionnaire were measured using a Likert scale, which enabled the quantification of subjective experiences and perceptions. Participants rated the frequency of their work-related stress, the perceived effectiveness of each breathing technique (diaphragmatic, box, and alternate nostril breathing), and their consistency in practicing these techniques over the

past month. This approach provided a nuanced understanding of how each technique influenced stress reduction. The Likert scale responses facilitated statistical analysis using SPSS, allowing for meaningful comparisons across techniques. Administering the questionnaire online ensured broad participation and convenience, making it accessible to a diverse group of young adults across Klang Valley.

#### *Data Analysis*

Data analysis was conducted using IBM SPSS Statistics software to evaluate the effectiveness of the three mindfulness breathing techniques in reducing work-related stress. Descriptive statistics were used to summarize demographic data and provide an overview of participants' stress levels and breathing practice patterns. Paired sample t-tests were applied to compare pre- and post-intervention stress scores for each breathing technique, allowing for the identification of statistically significant changes in stress levels. Additionally, Spearman's rank correlation was employed to examine the relationship between the frequency of breathing practice and the perceived effectiveness in stress reduction. This non-parametric test was chosen due to the ordinal nature of the Likert scale data. The combination of these statistical methods enabled a comprehensive analysis of both the impact and consistency of mindfulness breathing practices among young adults, providing robust insights into their potential as stress management tools.

#### **Results and Findings**

The stress measurement scale's internal consistency was evaluated using Cronbach's alpha, providing insights into the reliability of the stress assessment tool used in the study.

#### *Reliability Statistics*

Table 5

Stress Measurement

Cronbach's Alpha	N of Items
.725	4

The Cronbach's alpha for the stress measurement scale, incorporating both baseline and current stress levels (BaselineStress, BaselineImpact, CurrentStress, CurrentImpact), was calculated to be 0.725. This value indicates acceptable internal consistency, suggesting that the scale is a reliable measure of stress across different time points and contexts

*Cronbach’s Alpha for Effectiveness Measurement*

Similarly, the effectiveness measurement scale was assessed for reliability.

*Reliability Statistics*

Table 6

*Effectiveness Measurement*

Cronbach’s Alpha N of Items	
.904	3

The Cronbach’s alpha for the effectiveness scale (comprising BoxBreathingEffect, AltNostrilEffect, DiaphragmaticEffect) was 0.904, indicating that this scale reliably measures the perceived effectiveness of each breathing technique. This consistency is crucial for ensuring that comparisons between techniques are valid and reliable

**Paired Sample T-Tests**

*Box Breathing*

The table provided is from a Paired Samples Test, comparing the stress levels before practicing any breathing techniques to the perceived effectiveness of Box Breathing in reducing stress levels.

*Variables Compared*

- Please rate your stress level a month ago before practicing any breathing techniques
- How effective was Box Breathing in reducing your stress levels?

		Paired Differences			Two-Sided p	Significance
		Mean	Std. Devi 1	df		
Pair 1	Please rate your stress level a month ago before practicing any breathing techniques - How effective was Box Breathing in reducing your stress levels?	0.448	1.023	5.436	153	<.001

Fig 6: Paired Sample Test – Box Breathing

The mean difference between the stress level before practicing any techniques and the effectiveness of Box Breathing is 0.448. This indicates a positive difference in perceived effectiveness.

The t-value of 5.436 indicates the ratio of the mean difference to the standard error of the difference. This positive value suggests that Box Breathing is perceived as effective. Both p-values are less than 0.001, indicating that the observed difference in the perceived effectiveness of Box Breathing is statistically significant. These results support H1 and answer Research Question 1

*Alternate Nostril Breathing*

The table below compares the stress levels before practicing any breathing techniques to the perceived effectiveness of Alternate Nostril Breathing in reducing stress levels.

*Variables Compared*

- Please rate your stress level a month ago, before practicing any breathing techniques
- How effective was Alternate Nostril Breathing in reducing your stress levels?

		Paired Differences			Significance	
		Mean	Std. Devi 1	df	Two-Sided p	
Pair 1	Please rate your stress level a month ago before practicing any breathing techniques - How effective was Alternate Nose Breathing in reducing your stress levels?	0.383	0.951	4.999	153	<.001

Fig 7: Paired Sample Test: Alternate Nose Breathing

The mean difference between the stress level before practicing any techniques and the effectiveness of Alternate Nostril Breathing is 0.383. This indicates a positive difference in perceived effectiveness

The positive t-value of 4.999 suggests that Alternate Nostril Breathing is perceived as effective. Both p-values are less than 0.001, indicating that the observed difference in perceived effectiveness of Alternate Nose Breathing is statistically significant. These results support H2 and answer Research Question 2

*Diaphragmatic Breathing*

The table below compares the stress levels before practicing any breathing techniques to the perceived effectiveness of Diaphragmatic Breathing in reducing stress levels.

*Variables Compared*

- Please rate your stress level a month ago before practicing any breathing techniques
- How effective was Diaphragmatic Breathing in reducing your stress levels?

		Paired Differences			Significance	
		Mean	Std. Devi 1	df	Two-Sided p	
Pair 1	Please rate your stress level a month ago before practicing any breathing techniques - How effective was Diaphragmatic Breathing in reducing your stress levels?	0.11	0.813	1.685	153	0.094

Fig 8: Paired Sample Test: Diaphragmatic Breathing

The mean difference between the stress level before practicing any techniques and the effectiveness of Diaphragmatic Breathing is 0.110. This indicates a positive, though small, difference in perceived effectiveness.

The positive t-value of 1.685 suggests a positive perception of Diaphragmatic Breathing, though it is not very strong. This p-value is above 0.05, indicating that the observed difference in the perceived effectiveness of Diaphragmatic Breathing is not statistically significant when using a two-sided test. Therefore, the findings reject H3, and Research Question 3 is answered

**Spearman's Rank Correlation**

Spearman's rank correlation was used to assess the relationships between the frequency of practicing breathing techniques and stress levels.

*Correlation between Practice Frequency and Stress Levels*

The correlation table presents the relationship between the consistency of practicing three different breathing techniques over the past month and the current stress levels after practicing these techniques for a month. Here are the key findings:

		How consistently did you practice Box Breathing over the past month?	How consistently did you practice Alternate Nose Breathing over the past month?	How consistently did you practice Diaphragmatic Breathing over the past month?	Please rate your current stress level after practicing the breathing techniques
How consistently did you practice Box Breathing over the past month?	Pearson Correlation	1	0.913	0.761	-0.864
	Sig. (2-tailed)		<.001	<.001	<.001
	N	154	154	154	154
How consistently did you practice Alternate Nose Breathing over the past month?	Pearson Correlation	0.913	1	0.623	-0.803
	Sig. (2-tailed)	<.001		<.001	<.001
	N	154	154	154	154
How consistently did you practice Diaphragmatic Breathing over the past month?	Pearson Correlation	0.761	0.623	1	-0.75
	Sig. (2-tailed)	<.001	<.001		<.001
	N	154	154	154	154
Please rate your current stress level after practicing the breathing techniques	Pearson Correlation	-0.864	-0.803	-0.75	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	154	154	154	154

Fig 9: Correlation

*Current Stress Levels*

The current stress level after practicing the breathing techniques for a month is strongly negatively correlated with the consistency of practicing Box Breathing ( $r = -.864, p < .001$ ). The current stress level is also strongly negatively correlated with the consistency of practicing Alternate Nostril Breathing ( $r = -.803, p < .001$ ).

The current stress level is moderately negatively correlated with the consistency of practicing Diaphragmatic Breathing ( $r = -.750, p < .001$ )

### **Recommendation for Future Study**

The findings of this study offer several important recommendations for practitioners, policymakers, educators, and future researchers. For practitioners, it is recommended to integrate mindfulness breathing techniques, particularly box breathing and alternate nostril breathing, into structured stress management programs for young adults. These techniques should be taught with proper instruction and supported by resources that promote consistent practice, as regular engagement is essential for achieving optimal stress reduction outcomes. Practitioners should also consider offering workshops or digital modules to increase accessibility and encourage long-term adherence.

Policymakers are encouraged to support mental health initiatives in the workplace by incorporating breathing exercises into employee wellness programs. This can be achieved through policy frameworks that mandate stress management training, allocate funding for mental health resources, and incentivize organizations to adopt holistic approaches to employee well-being. Such measures can contribute to healthier work environments, reduced burnout, and improved productivity across sectors. Educators and curriculum developers should embed mindfulness breathing practices into health and wellness education, particularly in tertiary institutions where young adults face academic and career-related pressures. Early exposure to these techniques can foster emotional resilience, enhance self-regulation, and equip students with lifelong coping strategies. Institutions may also consider integrating breathing exercises into orientation programs or extracurricular wellness initiatives.

For future research, longitudinal studies are essential to evaluate the sustained impact of breathing techniques on stress reduction over time. Researchers should explore variables such as individual commitment, technique proficiency, and contextual factors that may influence effectiveness. Additionally, studies should investigate the combined effects of breathing techniques with other complementary practices such as mindfulness meditation, yoga, and cognitive behavioral strategies to develop comprehensive stress management frameworks. Comparative research across different age groups, occupational sectors, and cultural contexts would also provide valuable insights into the adaptability and generalizability of these interventions. To strengthen the evidence base, future studies should employ randomized controlled trials, and mixed method approaches that incorporate both quantitative and qualitative data. This would allow for a more nuanced understanding of participants' experiences and the mechanisms through which breathing techniques exert their effects. Furthermore, researchers should examine the role of digital platforms and mobile applications in delivering breathing interventions, assessing their effectiveness and user engagement. By addressing these recommendations, stakeholders can contribute to the advancement of accessible, evidence-based mental health strategies tailored to the needs of diverse populations.

### **Conclusion**

This research can be summarized as the study contributes to the growing body of evidence supporting mindfulness breathing techniques as effective tools for managing work-related

stress among young adults. The findings demonstrate that box breathing and alternate nostril breathing offer significant benefits in reducing stress levels, while diaphragmatic breathing showed more variable outcomes. These results underscore the importance of selecting appropriate techniques and ensuring proper practice to maximize their effectiveness.

The research highlights the potential for integrating mindfulness breathing practices into workplace wellness programs, educational curricula, and personal stress management routines. By adopting these techniques, individuals and organizations can foster healthier environments that support emotional well-being and resilience. The study also emphasizes the need for continued exploration into the long-term effects and broader applicability of these interventions across different populations and settings. While the study provides valuable insights, it also acknowledges limitations such as the use of convenience sampling and reliance on self-reported data. These factors suggest the need for future research employing more rigorous methodologies, including randomized controlled trials and longitudinal designs. Such efforts will help validate the current findings and expand the understanding of how mindfulness breathing techniques can be optimized for diverse groups.

In conclusion, mindfulness breathing techniques represent a promising, accessible, and low-cost approach to stress management. Their integration into mental health strategies can empower young adults to navigate the challenges of modern work life with greater calm, clarity, and control. Continued research and implementation will be key to unlocking their full potential in promoting psychological well-being and enhancing quality of life.

#### *Novelty and Contribution*

This research makes a distinct contribution to the social sciences by providing the first comparative analysis of three widely practiced mindfulness breathing techniques within a single, consistent framework targeting young adults in high-stress occupational settings. Unlike prior studies that focus on individual techniques or clinical populations, this study employs a robust quantitative design with a sizable sample from an urban workforce, offering empirical evidence on which techniques are most effective for workplace stress management. The findings have practical implications for organizational wellness programs and mental health interventions, supporting the integration of cost-effective, non-pharmacological strategies into occupational health policies.

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## References

- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Beck, J. S. (2011). *Cognitive Behavior Therapy: Basics and Beyond*. Guilford Press.
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology, 102*(3), 389–402.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385–396.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer US. <https://doi.org/10.1007/978-1-4899-2271-7>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Eby, L. T., Allen, T. D., Conley, K. M., Williamson, R. L., Henderson, T. G., & Mancini, V. S. (2019). Mindfulness-based training interventions for employees: A qualitative review of the literature. *Journal of Organizational Behavior, 40*(2), 115–134.
- Epe, S., Singh, N., & Balkrishna, A. (2021). Alternate nostril breathing at different rates and its effects on heart rate variability and blood pressure. *Clinical and Epidemiological Research in Health and Disease*.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*(1), 35–43.
- Hakanen, J. J., & Bakker, A. B. (2017). Born and bred to burn out: A life-course view and reflections on job burnout. *Journal of Occupational Health Psychology, 22*(3), 354–364.
- Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organizational performance. *Industrial and Organizational Psychology, 8*(4), 576–602.
- Kabat-Zinn, J. (1990). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. Delta.
- Ma, X., Yue, Z. Q., Gong, Z. Q., Zhang, H., Duan, N. Y., Shi, Y. T., Wei, G. X., & Li, Y. F. (2017). The effect of diaphragmatic breathing on attention, negative affect and stress in healthy adults. *Frontiers in Psychology, 8*, 874.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Saoji, A. A., Raghavendra, B. R., & Manjunath, N. K. (2019). Effects of yogic breath regulation: A narrative review of scientific evidence. *Journal of Ayurveda and Integrative Medicine, 10*(1), 50–58.
- Telles, S., Singh, N., & Balkrishna, A. (2016). Alternate nostril breathing at different rates and its effects on the heart rate variability and blood pressure. *International Journal of Yoga, 9*(2), 66–71.
- World Health Organization. (2020). *Mental health in the workplace*. Retrieved from <https://www.who.int>