

Does Mindfulness and Psychological Capital Affect Work Engagement of Healthcare Workers? A study case in DKI Jakarta

Putu Ayu Puspita, Muhammad Irfan Syaebani

Department of Management, Faculty of Economics and Business, University of Indonesia

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ABSTRACT

Background: The workforce has indicated that there were complaints directed at health workers regarding the lack of services provided at healthcare facilities in DKI Jakarta. The primary objective of this study is to comprehensively understand the mindfulness of health workers in carrying out their duties, examine the psychological capital of health workers, and explore their impact on the engagement of health workers.

Subjects and Method: This was a cross-sectional study conducted in DKI Jakarta. Total sample was 280 health workers. The data were analyzed using structural equation modeling through the empirical method. The data analysis was conducted using Covariance-Based Structural Equation Modeling (CB-SEM).

Results: Work engagement was directly associated with mindfulness ($b = 0.23$; 95% CI= 4.60 to 4.76; $p < 0.001$) and psychological capital ($b = 0.91$; 95% CI= 4.70 to 4.84; $p < 0.001$). Psychological capital was affected by mindfulness ($b = 1.01$; 95% CI= 4.69 to 4.89; $p < 0.001$).

Conclusion: Work engagement is directly associated with mindfulness and psychological capital. Psychological capital is affected by mindfulness.

Keywords: mindfulness, psychological capital, work engagement, health workers

Correspondence:

Putu Ayu Puspita. Masters Program in Management, Faculty of Economics and Business, Universitas Indonesia. Gd. Pascasarjana FEB UI Jl.Salemba Raya No.4, Jakarta 10430. Email: putu.ayu13@ui.ac.id. Phone number: +62 81284752886.

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BACKGROUND

Based on what is stated in Undang-Undang No. 36 of 2014, health workers are everyone who devotes themselves to the health sector and has knowledge and/or skills through education in the health sector which for certain types requires an authority to carry out health efforts. The same Law states that health workers are interested in improving

health services quality to achieve maximum results for the community. This improvement can increase awareness, willingness, and ability to live a healthy life to achieve the availability of health facilities and infrastructure as capital for developing socially and economically productive Indonesian human resources. Good health services are also one of the elements of public welfare, as

referred to in the Preamble of the 1945 Constitution of the Republic of Indonesia.

Based on data from the Central Statistics Agency (BPS) in 2021, the number of health workers in DKI Jakarta reached 56,853, consisting of 36,725 nurses, 7,473 doctors, 5,658 pharmaceutical workers, 5,766 midwives, and 1,231 nutritionists. Compared to around 10.6 million people, each health worker in DKI Jakarta will serve 186 people. This number is large enough to be handled by one health worker and can increase health workers' burden.

DKI Jakarta Province is Indonesia's capital city and the largest city with a special region status. In addition, Jakarta is a metropolitan city. It is the center of business, politics, and culture, home to the offices of state-owned enterprises, private companies, and foreign companies. The city is also home to government agencies and the ASEAN secretariat office. This fact makes DKI Jakarta an indicator of success, demonstrating successful health implementation for this research. If patients are satisfied with the facilities provided by DKI Jakarta, other regions can emulate and implement this success in their area.

Health workers are an important part of protecting and improving the quality of individual health, especially in achieving national and global goals (Ge et al., 2021). However, health workers themselves face severe psychosocial pressures, such as having to work night shifts, long working hours, high demands in caring for patients, health problems, emotional distress due to bad interactions with patients and colleagues and poor promotion prospects. When healthcare workers believe that their work can create new and reasonable value for themselves, they have a higher sense of career identity, become more engaged and satisfied with the work they do (Zhang et al., 2023).

Mindfulness can protect health workers from crisis and help them to develop personal resources which in turn affect the level of employee work engagement (Fiaz & Muhammad Fahim, 2023). Over the past two decades there is a lot of scientific evidence that mindfulness contributes to the optimal functioning of organizations especially when it comes to when work engagement is controlled by each individual especially their awareness of the work environment, attention to task, and focus on the present moment (Gunasekara & Zheng, 2019). Mindfulness is also associated with having control and choice over feelings and having perspective and awareness and if referring to a study conducted previously, it is known that mindfulness helps nurses to regulate their internal responses to situations (Oates, 2018). In addition, mindfulness is also thought to increase the level of job satisfaction (Hülshager & Alberts, 2021).

In general, potential employees are sought after for their expertise which is included in their implicit knowledge, skills, and individual abilities objectively measured by their level of education and experience. Companies may approach potential employees for their social capital or who the candidate knows, their relationships, the candidate's strategic position in their personal and professional social networks which can be easily measured by social network analysis techniques (Wasserman & Faust, 1994), and the potential connections they may bring into the company (Luthans & Youssef-Morgan, 2017). Then once contracted and hired, these employees can then be referred to as "investments" through employee training and development initiatives to enrich their social capabilities.

Mindfulness helps an individual to be mindfully aware and open (Brown & Ryan, 2003) and enables them to adjust to their

true self (self-awareness) and then become their true self (self-regulation). When adapted to the work context, mindfulness helps individuals to make conscious decisions to engage with work-related activities, thus internalizing external role demands into their core sense of self (Weinstein et al., 2009). As is well known, work engagement is dependent on who develops themselves at work where it is known that by supporting individuals' authentic functioning, their attention will promote work engagement. In addition to these indirect effects, there may be residual direct effects of mindfulness on work engagement due to the re-appreciation of current experiences in new and more challenging ways (Leroy et al., 2013). Mindfulness promotes a healthy way of relating to colleagues in the workplace (Glomb et al., 2011) which includes taking the perspective of others and reducing dysfunctional or escalatory habits.

Work engagement is a condition in which an individual is motivated and passionate about work, a concept in which relatedness to work can be seen as a motivational concept (Leiter & Bakker, 2010). When an individual is highly motivated towards their work, it will be very easy for them to set goals and ensure that they can achieve these goals so that they can achieve success. Work engagement also reflects the individual energy that each employee brings to their work. Almost all human resource consulting firms strive to increase the level of work engagement. Almost all companies without exception claimed that they have found convincing evidence that work engagement will increase company profitability through productivity from sales, customer satisfaction, to increased employee retention rates. This sends a message to healthcare facilities that improving work engagement will pay off (Schaufeli & Bakker, 2010).

SUBJECTS AND METHOD

1. Study Design

This study employed a quantitative approach and utilized Covariance-Based Structural Equation Modeling (CB-SEM) for data analysis to examine the hypothesized mediating and direct effects. The research adhered to the guidelines proposed by Hair (2019) and selected CB-SEM as the method to assess the theoretical model. CB-SEM is a robust statistical technique capable of analyzing intricate relationships among variables, enabling the examination of covariance matrices of observed variables. The study was conducted in DKI Jakarta. The data was collected and analyzed for 4 months from March to June 2023.

2. Population and Sample

The participants in this study were health workers throughout DKI Jakarta. Data was collected across professions to achieve the general data needed for this research. The target population for collecting data in this study are health workers who comply with the criteria of Law no. 36 of 2014 in DKI Jakarta. In this research we used Maximum Likelihood Estimation (MLE) because there is no exact data on the population. The sample size needed is item multiply by 5 which in this case is $55 \times 5 = 275$ samples. The samples collected are 372 data but after data cleaning the usable data is 280 data

3. Study Variable

This study adopted a quantitative approach, using mindfulness as the independent variable to investigate its impact on work engagement (the dependent variable). Additionally, the research explored the mediating role of psychological capital in the relationship between mindfulness and work engagement. By examining these connections, the study aimed to gain a comprehensive understanding of how mindfulness influences work

engagement, taking into account the role played by psychological capital as a mediator.

4. Operational Definition of Variables

Mindfulness is a transformative practice that cultivates heightened conscious awareness and openness, enabling individuals to attain greater self-awareness and self-regulation. When incorporated into the workplace, mindfulness empowers individuals to make deliberate and conscious choices, leading to active engagement in job-related tasks and a deeper integration of external role demands into their intrinsic identity. To measure mindfulness in this work-related context, the research employed the well-established Mindfulness at Work scale, developed by Hulsheger and Alberts (2020), which comprises 22 items designed to comprehensively assess mindfulness attributes.

Psychological Capital also known as PsyCap, encompasses the positive development of an individual, characterized by four key components: (1) high self-efficacy, which reflects individuals' confidence in their ability to tackle challenging tasks; (2) optimism, enabling individuals to maintain positive attributions for themselves in the present and future; (3) hope, fostering resilience and a persistent effort to achieve goals; and (4) resilience, allowing individuals to rebound from adversities and difficulties on their journey to success. The level of psychological capital among respondents in this study was evaluated using the extensively validated Psychological Capital Questionnaire (PCQ) developed by Luthans, Avolio, and Avey (2007), which comprises 24 thoughtfully designed items

Work engagement is characterized by three fundamental components, as defined by Salanova et al. (2002b): (1) vigor, which denotes the robust mental energy and resilience individuals exhibit while carrying out their work; (2) dedication, reflecting an

individual's profound willingness, influenced by a sense of significance, inspiration, enthusiasm, pride, and willingness to take on challenges, to complete their tasks; and (3) absorption, indicating a sense of joy and intense concentration experienced by an individual during work, often leading to losing track of time and finding it challenging to detach from work. To assess work engagement in this study, the researchers will employ the widely recognized Utrecht Work Engagement Scale (UWES) as the measurement tool, capturing the components of vigor, dedication, and absorption (Bakker and Leiter, 2010). These three indicators are effectively represented through a set of nine statement items

5. Study Instruments

Mindfulness Hulsheger & Alberts (2021) developed a comprehensive scale comprising 22 items to measure mindfulness in the workplace context. The study aimed to investigate the real impact of mindfulness on individuals within their work settings. The Mindfulness at Work questionnaire consists of 22 items, with 5 items measuring describing, 5 items measuring non-reactivity, 4 items measuring nonjudging, and 8 items assessing the act of awareness.

The questionnaire demonstrated high correlation with two widely used mindfulness questionnaires, FFMQ and MAAS, while being specifically designed to be applicable in work environments (Hulsheger & Alberts, 2021).

Psychological Capital To assess the psychological state of health workers, this study employed a well-established approach based on the work of Luthans and Youssef-Morgan (2017), which focuses on measuring the psychological capital of health workers during their work activities. The researchers utilized the Psychological Capital Questionnaire, consisting of 24 items grouped into four dimensions: self-efficacy (6 items),

hope (6 items), resilience (6 items), and optimism (6 items). Respondents rated the 24 items on a six-point Likert scale, ranging from 1 (never) to 6 (always).

Work Engagement In this study, the measurement tool used to assess work engagement is the well-established Utrecht Work Engagement Scale (UWES) developed by Schaufeli and Bakker (2010). The UWES comprises three key components: vigor, dedication, and absorption. Each component is represented by three statement items, resulting in a total of nine items in the scale. Respondents rate the items using a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

6. Data analysis

Questionnaire Feasibility Test

In this study, the questionnaire utilized was translated into Indonesian from an international journal relevant to the research topic. Prior to distribution to a larger sample, a pre-test was conducted with three respondents who met the research criteria. The purpose of the pre-test was to evaluate their comprehension of the statements in the questionnaire. Based on the feedback received from the pre-test participants, necessary improvements were made to enhance the clarity and accuracy of the questionnaire. The refined version of the questionnaire was then administered to a larger sample for data collection and analysis.

Descriptive and Demographic Analysis

After completing the data collection process, the author conducted both descriptive and demographic analyses using Ms. Excel. Descriptive statistical analysis was employed to evaluate the characteristics of the collected data, including calculating the mean values of each research indicator. Additionally, the study explored various demographic factors, such as job type,

tenure, healthcare ownership, work location, gender, and immediate supervisor, to gain insights into the participants' profiles and potential relationships with the research variables

Validity and Reliability Analysis

Validity testing was conducted to assess the accuracy of the measurement tool used in this study. Factor analysis was performed to determine the validity of the research questionnaire. The validity test was conducted using Lisrel 8.8 with CB-SEM, taking advantage of the sufficient sample size of 411, which allowed for data analysis with maximum likelihood estimation. Reliability testing was also performed to assess the consistency and stability of the measurement tool. Construct reliability (CR) and average variance extracted (AVE) were evaluated using standardized factor loadings (SLF) in Lisrel 8.8. A CR value above 0.6 indicates good reliability, demonstrating that the measurement tool consistently measures the latent variables. Additionally, an AVE value greater than 0.5 indicates good convergent validity of the latent variables, implying that the measurement tool captures the underlying constructs effectively.

Structural Equation Modeling (SEM) Analysis

After conducting validity and reliability tests using Lisrel 8.8, additional assessments were carried out to evaluate the adequacy of the theoretical model in representing the data. This evaluation was accomplished through goodness-of-fit measures. A strong goodness-of-fit value signifies a robust representation of the theoretical structure based on the data collected from the respondents. To examine the significance of the indirect effect (mediation path) of an independent variable on the dependent variable through a mediator variable in mediation analysis, the Sobel test was

employed. The Sobel test helps determine whether the indirect effect is statistically significant, providing insights into the mediating role of the mediator variable in the relationship between the independent and dependent variables

2023. The study received a total of 280 responses from healthcare workers (N=280). Among the respondents, 77% identified as female, while 23% identified as male. In terms of age distribution, the majority of respondents (43%) fell within the 30-40 years old range. Additionally, 34% of respondents were in the age range of 22-30 years old, 16% were between 40-50 years old, and 8% were above 50 years old

RESULTS

1. Sample Characteristic

The survey responses were collected over a period of three months, from March to June

Table 1. Sample Characteristic

Characteristics	Category	Frequency	Percentage
Profession	Assistant to Medical and Health Experts	33	12%
	Pharmacist	10	4%
	Midwife	56	20%
	Dietitian	1	0%
	Dentist	10	4%
	Specialist Doctor	6	2%
	General Practitioner	45	16%
	Health Epidemiologist	1	0%
	Medical Physicist	1	0%
	Nutritionist	10	4%
	Orthotic Prosthetist	2	1%
	Nurse	52	19%
	Medical Records and Health Information Officer	2	1%
	Clinical Psychologist	1	0%
	Blood Service Technician	4	1%
	Health Administration and Policy Personnel	10	4%
	Health Promotion and Behavior Personnel	1	0%
	Environmental Sanitation Personnel	9	3%
	Pharmaceutical Technical Personnel	8	3%
	Dental and Oral Therapist	18	6%
Ownership	Government	220	79%
	Non Government	60	21%
Gender	Male	64	23%
	Female	216	77%
Age Range	22-30 years old	95	34%
	30-40 years old	119	43%
	40-50 years old	44	16%
	>50 years old	22	8%
Tenure	<1 years	12	4%
	1-2 years	37	13%
	3-5 years	53	19%
	5-10 years	103	37%
	11-15 years	21	8%

2. Multivariate Analysis

Confirmatory factor analysis, model fitness, and path analysis were performed using Lisrel 8.8. with the Structural Equation Modelling with Covariance Based approach to analyze the relationship between the variables. The method employed for the analysis was Maximum Likelihood Estimation, with questionnaire items multiplied by 5, as recommended by Hair et al.,(2014) for the sample size of N=280 and a total of 55 questionnaire items used in this research.

The results of the confirmatory factor analysis (CFA) for each instrument utilized in the study were found to be acceptable, as presented in Table 2. The goodness-of-fit for the model employed can be observed in Table 3. The findings indicate that mindfulness significantly influences psychological capital (t-value = 7.89), leading to the acceptance of H1 (mindfulness to psychological capital). Additionally, the study reveals that psychological capital significantly impacts work engagement (t-value = 5.13), confirming the acceptance of H3 (psychological capital to work engagement). Moreover, it is found that psychological capital acts as a mediator, influencing the relationship between mindfulness and work engagement. The indirect effect signifies that psychological capital plays a mediating role in the connection between mindfulness and work engagement.

It is found that mindfulness affects psychological capital (t-value = 7,89) so this means that H1 (mindfulness to psychological

capital) is accepted. Based on the study done, psychological capital affects work engagement (t-value 5,13) which means that H3 (psychological capital to work engagement) is accepted. It is also found that psychological capital affects the connection of mindfulness and work engagement as a mediator. The indirect effect of this relationship means that psychological capital mediates the connection of mindfulness that will affect work engagement. Based on the analysis on CB-SEM with Lisrel 8.8, it was found that the connection (t-value) between Mindfulness and Work Engagement was only 1,50 when the accepted value should be more than 1,65 (Hair et al., 2014). This means H2 (mindfulness to work engagement) is rejected because there is no direct effect between mindfulness and work engagement. These findings suggest that healthcare facilities should work more on raising mindful awareness to raise its workers psychological capital to enhance more work engagement.

There is indeed an indirect effect from mindfulness to work engagement via psychological capital. The indirect effect was calculated using the Sobel test, and the result yielded a t-value of 4.30, confirming the presence of a significant indirect effect between mindfulness and work engagement, with psychological capital serving as the mediator. Therefore, H4 (indirect effect of mindfulness, psychological capital to work engagement) is accepted based on the study's findings.

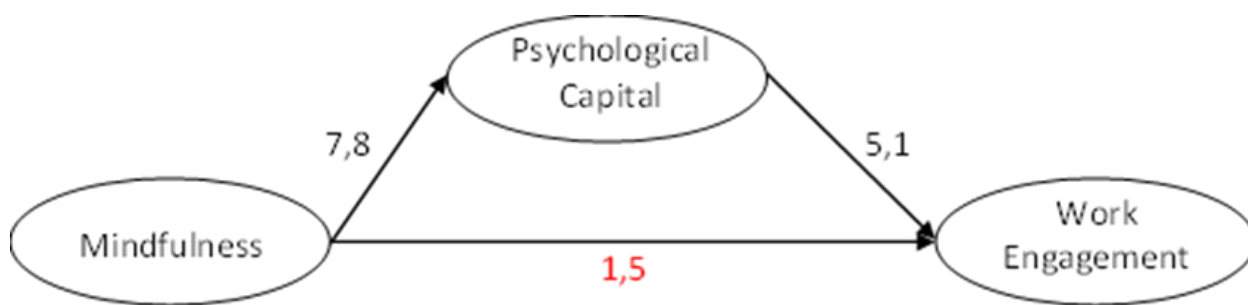


Figure 1. PATH Analysis

Table 1. The result of PATH Analysis

Dependent Variables	Independent Variables	b	CI 95%		p
			Lower Limit	Upper Limit	
Direct effect					
Work Engagement	← Mindfulness	0.23	4.60	4.76	<0.001
Work Engagement	← Psychological Capital	0.91	4.70	4.84	<0.001
Indirect effect					
Psychological Capital	← Mindfulness	1.01	4.69	4.89	<0.001
N observation= 280					
Log likelihood= 1185.5					

Table 2. Confirmatory Factor Analysis

Variables	CR	AVE
Mindfulness	0.97	0.61
Psychological capital	0.97	0.60
Work engagement	0.95	0.69

Table 3. Goodness-of-fit model

Goodness of fit	Reference	Values
RMSEA	≤0.08	0.06
NFI	≥0.90	0.96
NNFI	≥0.90	0.98
CFI	≥0.90	0.98
RFI	≥0.90	0.96

DISCUSSION

This study analyzes the effect of mindfulness on work engagement using psychological capital as a mediator. Internal factor plays a vital role in developing the work behavior such as work engagement which is used as the dependent variable in this study. Meanwhile internal factor helps with work behavior, to control and shape it, it is necessary to have a clear understanding about how much internal factor affect work.

Healthcare workers are an integral part of protecting and improving the health of individuals, especially in achieving national and global goals (Ge et al., 2021). However, healthcare workers themselves face significant psychosocial pressures, such as working night shifts, long working hours, high demands in patient care, health disorders, emotional stress due to negative

interactions with patients and colleagues, and poor prospects for promotion. When healthcare workers believe that their work can create new value and make sense for themselves, they have a higher sense of career identity, become more engaged, feel more committed, and satisfied with the work they do (Zhang et al., 2023).

Based on the participants in this study, it is evident that mindfulness indirectly influences work engagement by enhancing psychological resources, which in turn affects their psychological capital. Simply being aware of their work does not automatically lead to improved service quality or high work engagement, as expected. However, the practice of mindfulness among healthcare workers may enable them to cultivate a more positive mindset, ultimately leading to increased work engagement. This

heightened engagement helps them better comprehend the purpose and objectives of their tasks, finding joy in delivering exceptional service.

Furthermore, incorporating mindfulness into their daily routines can reduce the likelihood of errors during medical procedures or critical actions, safeguarding both the health worker and the patient. Therefore, it becomes imperative for all stakeholders to prioritize and actively foster personal and collective awareness at every step of the work performed. By doing so, psychological resources, work engagement, and the overall quality of services provided by healthcare workers and facilities can be substantially improved.

This aspect is particularly critical in DKI Jakarta, given its high population density and diverse ethnicities, making it the capital city where healthcare services need to be efficient and of the highest standard. Immediate attention from all involved parties is required to ensure that mindfulness becomes an integral part of the healthcare culture, leading to enhanced psychological capital, work engagement, and ultimately elevating the quality of healthcare services provided in the region.

Mindfulness is the internal ability that may influence and affect health workers behaviors at work. This study examined a model to describe how mindfulness affect work engagement especially in the health care workers which have enormous workload (Fiaz & Muhammad Fahim, 2023). This study identified that mindfulness affects health workers psychological capital in which also affect their engagement at work. The respondents that participated in this research can confidently and effectively communicate their thoughts, beliefs, opinions, and expectations regarding work-related matters, effortlessly expressing them in words during workplace discussion. As

also said by Kotze et al. (2017) stated that mindfulness has the ability to influence employee work engagement. This finding aligns with the research conducted by Silver et al. (2018), which also found a positive relationship between mindfulness and work engagement. However, the results of this study are consistent with the findings of Janssen et al. (2020), who observed that increased mindfulness led to a decrease in work engagement as respondents became more aware of job pressures.

Mindfulness is also associated with having control and choice over emotions, gaining perspective and awareness, and according to previous studies, it is known that mindfulness helps nurses regulate their internal responses to situations (Oates, 2018). It is found that mindfulness significantly affect psychological capital and is the most significant path in this study. The health workers feel confident in expressing their ideas related to their work, setting targets in their area of work, and finding various ways to achieve their goals in their current job while also being able to confidently and effectively communicate their thoughts, beliefs, opinions, and expectations regarding work-related matters, effortlessly expressing them in words during workplace discussions.

This study also finds that being mindful and practicing it at work bring positive emotions to shield the health workers from crises and help them to grow more personal resources. Psychological capital strongly affect engagement at work which is in line with the findings of existing studies (Fiaz & Muhammad Fahim, 2023). This is also similar to the study done by Zhang et al., (2023) conducted on specialized and general nurses in China during the Covid-19 pandemic, it is found that there is a positive relationship between psychological capital and work engagement. The respondents are

confident in expressing their ideas related to their work, setting targets in their area of work, and finding various ways to achieve their goals in their current job. This indicates that having positive personal resources affect health workers' engagement at work.

Abundant scientific evidence over the past two decades indicates that mindfulness contributes to optimal organizational functioning by empowering individuals to control their work engagement through increased awareness of the work environment, attention to tasks, and focus on the present conditions (Gunasekara and Zheng, 2018). This aligns with the finding that having psychological capital enhances nurses' work engagement during the ongoing Covid-19 pandemic (Zhang et al., 2023). Furthermore, another study confirms a significant relationship between psychological capital and work engagement, suggesting that managers can utilize training programs or interventions to enhance nurses' psychological capital (Wu and Li, 2020). This study finds that psychological capital affects the relationship between mindfulness and work engagement as a mediator (indirect effect). This means that being mindful of their work will affect their personal resource positively and help them to keep being positive to be able to have a good engagement at their work despite the stress they have while they worked.

This study has successfully established a connection between mindfulness and work engagement, but the relationship is mediated by psychological capital rather than a direct link from mindfulness to work engagement. These findings emphasize the crucial role of psychological capital in fostering a positive work engagement among health workers. The presence of positive psychological capital can significantly influence health workers, encouraging them to

make greater contributions and display higher levels of engagement in their work. By nurturing and enhancing psychological capital, healthcare organizations can effectively cultivate a workforce that is more motivated, dedicated, and actively engaged in delivering high-quality healthcare services.

Based on the comprehensive discussion, it can be confidently concluded that mindfulness plays a significant role in enhancing the psychological capital of healthcare professionals. To ensure the delivery of high-quality healthcare services, all stakeholders, including hospitals, healthcare facilities, government bodies, and professional associations, should prioritize the promotion of mindfulness at work. Creating a conducive environment that fosters mindfulness among healthcare workers will empower them with the internal resources needed to effectively cope with the demands and pressures of their work.

To further advance the understanding of mindfulness's impact on work engagement, more training programs and research trials focused on mindfulness can be conducted. These initiatives will provide valuable insights into the potential benefits of mindfulness practices in increasing work engagement among healthcare professionals. By investing in mindfulness and its integration into healthcare settings, stakeholders can pave the way for a more resilient and engaged healthcare workforce, ultimately benefiting both healthcare providers and patients alike.

This study makes a significant contribution by employing the Mindfulness at Work questionnaire developed by Hülshager & Alberts (2021) to assess mindfulness in healthcare facilities. The validity and reliability of the questionnaire have been demonstrated to be robust in this study, further strengthening its utility. From a managerial

perspective, the study's findings suggest that managers, supervisors, or leaders should consider organizing training sessions for employees to enhance their mindfulness. By fostering mindfulness, leaders can facilitate the development of positive personal resources among workers, particularly by raising awareness about positive emotions in the workplace. This approach can effectively contribute to increasing work engagement among health workers, thereby promoting a more productive and positive work environment.

AUTHOR CONTRIBUTION

Putu Ayu Puspita as the lead researcher who selects topics, collects, and analyzes data and writes the publication manuscripts. Muhammad Irfan Syaebani as researcher member who mentors, guides and assists the preparation of the publication manuscript.

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CONFLICT OF INTEREST

There is no conflict of interest in this study.

REFERENCE

- Brown KW, Ryan RM (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Fiaz S, Muhammad FS (2023). The influence of high-quality workplace relational systems and mindfulness on employee work engagement at the time of crises. *Heliyon*, 9(4). <https://doi.org/10.1016/j.heliyon.2023.e15523>
- Ge J, He J, Liu Y, Zhang J, Pan J, Zhang X, Liu D (2021). Effects of effort-reward imbalance, job satisfaction, and work engagement on self-rated health among healthcare workers. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-10233-w>
- Glomb TM, Duffy MK, Bono JE, Yang T (2011). Mindfulness at Work. In A. Joshi, H. Liao, & J. J. Martocchio (Eds.), *Research in Personnel and Human Resources Management*. 30: 115–157. [https://doi.org/10.1108/S0742-7301\(2011\)0000030005](https://doi.org/10.1108/S0742-7301(2011)0000030005)
- Gunasekara A, Zheng CS, Mei (2019). Examining the effect of different facets of mindfulness on work engagement. *Employee Relations*, 41(1), 193–208. <https://doi.org/10.1108/ER-09-2017-0220>
- Hair JF, Black WC, Babin BJ, Anderson RE (2014). *Multivariate data analysis* (2014th ed.).
- Hülshager UR, Alberts HJEM (2021). Assessing Facets of Mindfulness in the Context of Work: The Mindfulness-@Work Scale as a Work-Specific, Multidimensional Measure of Mindfulness. *Applied Psychology*, 70(4), 1728–1783. <https://doi.org/10.1111/apps.12297>

- Leiter MP, Bakker AB (2010). Work engagement: Introduction. In A. B. Bakker (Ed.) & M. P. Leiter, *Work Engagement: A Handbook of Essential Theory and Research*.
- Leroy H, Anseel F, Dimitrova NG, Sels L (2013). Mindfulness, authentic functioning, and work engagement: A growth modeling approach. *Journal of Vocational Behavior*, 82(3), 238–247. <https://doi.org/10.1016/j.jvb.2013.01.012>
- Luthans F, Youssef-Morgan C (2017). Psychological Capital: An Evidence-Based Positive Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4. <https://oi.org/10.1146/annurevorgpsych032516-113324>
- Oates J (2018). What keeps nurses happy? Implications for workforce well-being strategies. *Nursing Management*, 25(1), 34–41. <https://doi.org/10.7748/nm.-2018.e1643>
- Schaufeli WB, Bakker AB (2010). Defining and measuring work engagement: Bringing clarity to the concept. In *Work engagement: A handbook of essential theory and research*. 10–24). Psychology Press.
- Wasserman S, Faust K (1994). *Social Network Analysis: Methods and Applications*. In Cambridge: Cambridge University Press. (pp. 148–161).
- Weinstein N, Brown KW, Ryan RM (2009). A multi-method examination of the effects of mindfulness on stress attribution, coping, and emotional well-being. *Journal of Research in Personality*, 43(3), 374–385. <https://doi.org/10.1016/j.jrp.2008.12.008>
- Zhang M, Chen H, Wang N, Li Y, Li X, Liu, Y (2023). The mediating role of job satisfaction between psychological capital and work engagement among Chinese nurses during COVID-19 outbreak: A comparative study between nurse specialists and general nurses. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsy.2022.990216>