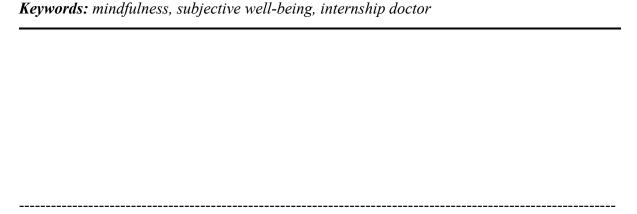
THE ROLE OF MINDFULNESS IN SUBJECTIVE WELL-BEING FOR INTERNSHIP DOCTORS

Kamila Sekar Arum, Esti Hayu Purnamaningsih

Abstract. Internship doctors face many stressors such as role conflict within and adjustment to their new working environments. These stressors decrease the doctors' subjective well-being and can further affect the quality of the health services they provide. One of the factors that influence doctors' subjective well-being is mindfulness. This research investigated the role of mindfulness for subjective well-being in internship doctors (N = 121). This study used the Positive and Negative Affect Schedule and Satisfaction with Life Scale to measure subjective well-being and a Mindful Attention Awareness Scale scale to measure mindfulness. The results of the study were analyzed using a simple regression analysis technique and the results were $R^2 = 0.204$ and F = 30.519 with p < 0.05. These results indicate that mindfulness has an effective contribution to the subjective variable of welfare by 20.4%. Furthermore, one-way ANOVA suggests internship duration affects doctors' subjective well-being as well. Doctors who spent 4–6 months as an intern had higher levels of subjective well-being compared to doctors who spent more than ten months in an internship.



Kamila Sekar Arum¹, *Esti Hayu Purnamaningsih²(correspondent author) ^{1,2}Faculty of Psychology, Universitas Gadjah Mada, Yogyakarta, Indonesia. e-mail: ¹kamila18094@yahoo.com, ²esti@ugm.ac.id

I. Introduction

Since 2010, Indonesian medical school graduates are obligated to participate in the doctor's internship program or Program Internship Dokter Indonesia (PIDI). PIDI is a preregistration professional training program that aims to increase young physicians' professionalism and independence. During PIDI periods, doctors are deployed to various areas around Indonesia's 32 provinces where they must provide health services for the local community and adjust to new working environments [1]. During the internship period, doctors experience various new events and must adapt to new environments. The process of adaptation

to changes in life events experienced by a person can influence subjective well-being, especially towards cognitive evaluation [18]

Based on the preliminary study conducted by the researchers, in general, the doctors experienced trouble in adapting to their new roles. Unlike apprenticed doctors, internship doctors hold full medical responsibility. This commitment often caused insomnia and psychological and physical breakdown. The doctors are often mentally unprepared for the limited facilities in their placement location. Moreover, emotional situations such as the death of a patient can also cause mental breakdown [15] As medical personnel, doctors are required to be perfectionists, because a single mistake cannot be tolerated [31]. Some of these characteristics support the doctor in providing maximum service to patients, but also support the negative mental health such as fighting the guilt, sadness, and anxiety experienced by doctors for bad events and mistakes in giving a successful action.

Chen, Lin, Li, Huang, and Lin [10] and Sen et al. [26] found a significant increase in depression symptoms in doctors during their internship periods apparently caused by long working hours and medical errors. They found that the increase in depression and anxiety typically starts in the first three months of the internship and remains consistent throughout the internship duration.

According to Luhmann, et al. [18], adaptation to new events affects an individual's subjective well-being and especially cognitive evaluation. Diener, Lucas, and Oishi [23] explained that subjective well-being is the personal perception and experience of positive and negative emotional responses and the global- and domain-specific cognitive evaluation of satisfaction with life.

One of the things that can reduce reactions and increase adaptive responses to stressful situations, and have a positive impact on subjective well-being is mindfullness. A study revealed that high levels of mindfulness in doctors negatively correlated with mood

disorders, such as decreased tension, depression, physical fatigue, emotional exhaustion [16]. Based on the explanation, this study aims to examine the role of mindfulness in subjective wellbeing.

II. Literature review

Snyder and Lopez [28] define subjective well-being as a person's individual judgment of his or her current status in the world, often used synonymously with the term *happiness*. Therefore, high levels of subjective well-being are found when people report feeling very happy, very satisfied with life, and when experiencing low levels of neuroticism [Diener & Lucas, in 11]. Baumeister, Vohs, Aaker, and Garbinsky [2] said that individuals with high levels of subjective well-being focus more on the present, rather than the past or future. Low levels of well-being decrease doctors' focus, empathy, and professionalism, which can cause medical errors and patient dissatisfaction [9]. Therefore doctors should have a high subjective well-being. Anyone with subjective well-being will oppose the present, compared to the past or the future [2]

Brown, Ryan, and Creswell [8] explained that individual's experiences are stimuli. In general, individuals react to stimuli within a very short time. The consequences of this process are that individuals may automatically create the concept, label, and judgment of their experience. Incomplete perception of an experience risks creating a shallow or distorted reality, which can cause improper emotional reactivity. An individual's capacity for attention and consciousness leads to an improved ability to focus on the present and prevents automatic response and reactiveness. This concept is called mindfulness [8] Shapiro [in 28] suggested that in practice, within a community, mindfulness can be described as attending nonjudgmentally to all stimuli in the internal and external environment. Mindfulness is crucial in increasing doctors' well-being, which is important for the quality of health services they provide. Mindfulness is important because doctors often deal with emotional situations and many stressors, and they must always be prepared and ready to handle negative emotions or bad experiences while serving patients. Research by Krasner et al. [16] revealed that a high level of mindfulness correlates negatively with mood disorders, causing decreases intension, depression, fatigue, and emotional burnout.

Mesmer, et al.[21] suggest that the benefits of the mindfulness trait extend to both personal and professional domains. Regarding personal benefits, the mindfulness trait was found to be positively correlated with confidence, mental health, emotional regulation, and

life satisfaction, and negatively correlated with perceived life stress, negative emotions, anxiety, and depression. Professionally, results suggest that mindfulness may benefit job satisfaction, performance, and interpersonal relationships, while also reducing burnout and work withdrawal. Fouriana et al.[13] also found that mindfulness contributes to decreasing anxiety and depression. Mindfulness also promotes one's capability to decrease reactiveness and increase adaptive responsiveness in stressful situations. This capability positively affects doctors' subjective well-being and performance, as well as the quality of services they provide [3]. In addition, consciousness and attention are crucial for building a good rapport with patients because they allow the doctor to be fully present in the consultation room [14]. This research investigates the role of mindfulness in subjective well-being. Based on the findings, the researcher proposed the following hypothesis: that mindfulness plays a positive role in subjective well-being for internship doctors.

III. Methods

Research Participants

The participants in this study were 121 internship doctors who were placed in various areas in Indonesia, including Java, Kalimantan, and Sumatera provinces. Participants' ages were between 23 and 31 years. The length of internship ranged from one to 12 months. All participants agreed to the informed consent before they responded to all scales.

Research Instruments

Each person's level of subjective well-being was measured using the Positive And Negative Affect Schedule (PANAS) and the Satisfaction With Life Scale (SWLS). The PANAS scale was created by Watson, Clark, and Tellegan [30] and modified by Utami [29]; the subscale for measuring life satisfaction (SWLS) was created by Pavet and Diener [22] and adapted by Utami [29]. The subjective well-being scale consists of 48 items with high internal consistency ($\alpha = .971$)

The level of mindfulness was measured using the Mindful Attention Awareness Scale (MAAS). MAAS was adapted from Brown and Ryan [7]. All of items of this scale were already reviewed using the back translation process. The mindfulness scale consists of 15 items with high internal consistency ($\alpha = .892$).

IV. Data Analysis

The subjective well-being measurement involved two different subtests (PANAS and SLWS). Score conversion of both subscales was done using a standard T-score. Statistical analysis was conducted using T-score.

We tested the hypothesis using a simple regression analysis test to find the magnitude of the contribution of mindfulness to subjective well-being. This study also conducted an additional test to investigate subjective well-being based on the internship period using one-way ANOVA. Prior to the test, the researchers checked the use of a parametric statistical test that consisted of a normality test and linearity. Normality was conducted using the Kolmogorov-Smirnov technique, while the linearity test was conducted using regression analysis.

V. Results & Discussion

The results show that subjective well-being is normally distributed (z = .709; p > .05), as is mindfulness (z = .775; p > .05). The linearity test showed that subjective well-being and mindfulness have a linear relationship: F = 31.828; p < .05. Therefore, the hypothesis can be tested using a parametric statistic test.

The results of simple regression analysis show $R^2 = 0.204$ and F = 30.519 with p< 0.05. Based on these results, we see that the mindfulness variable contributes 20.4% to the subjective well-being variable. The calculated value in the ANOVA table shows F = 30,519 with p < 0.05, which means that mindfulness plays a significant positive role on subjective well-being.

An additional test was conducted to investigate the difference in subjective well-being level based on the internship duration. A comparative test was conducted using one-way ANOVA. Results of the analysis suggest that there were different SWB based on internship duration (p < .05), and that the highest SWB mean score (M = 153.94) is in the 4–6 months' range of internship duration, while the lowest mean score range (M = 131.33) is in the 10–12 months' range.

This study found that mindfulness plays a significant positive role on subjective well-being. The component analysis also showed supportive results indicating that mindfulness has a positive correlation with positive affect (r = 0.331, p < 0.01) and life satisfaction (r = 0.280, p < 0.01), and conversely, it has a negative correlation to negative affect (r = -0.441, p < 0.01). This finding was supported by Mahmoudzadeh, Mohammadkhani, Dolatshahi, and Moradi [19] and Zelikson [32]. They demonstrated positive correlations between mindfulness and all psychological well-being dimensions. In other settings, Rahbari and Kord [24] showed that "search of meaning," "focus and attention

of awareness" and "non-judgement of internal experiences" were predictors of subjective well-being in patients.

Mindfulness explained a 20.4% variance in subjective well-being. This amount was supported by Englund-Helmeke [12], who found that mindfulness history is associated with increased emotional function and emotional well-being. In other settings, Kurd [17] found that mindfulness has a greater role in predicting nursing students' subjective well-being as well.

This research data revealed that 19.01% of participants had a high level of subjective well-being, and 64.46% had a moderate level of subjective well-being. The results are not in line with the researchers' initial assumption that internship doctors tend to have low levels of subjective well-being because of the adaptation process. Those levels of subjective well-being are possibly caused by internship doctors who think that their job is a challenge that they should overcome. The doctors' quality of service can build a good rapport with patients. This activity increases patients' satisfaction with doctors, which in turn increases doctors' subjective well-being [6]. Doctors' subjective well-being can be led by doctors' satisfaction with their contribution to the community and by the fact that that they can help other people as competent doctors.

From the data, 17.36% of participants had a high level of mindfulness, and 66.94% had a moderate level of mindfulness. Bishop et al. [5] argued that mindfulness enables individuals to reach optimum experiences because by being mindful, individuals can more easily adjust to attention switching. Doctors who apply mindfulness to their work can manage feelings of regret or worry while providing medical services to patients. Shapiro and Carlson [27] also said that mindfulness teaches individuals to accept every present experience without expecting more positive emotions (i.e., pleasure and safety) and without rejecting things that are undesirable (i.e., fear, anger, and shame). This acceptance is useful for allowing internship doctors to openly accept all good and bad experiences during their internship periods. This way, all the challenges in the adaptation process for their new roles and their adaptation to the new environment become optimal experiences and result in happiness [20]. Moreover, mindfulness has also been proven to improve doctors' ability to give attention and intensively listen and respond effectively to their patients [4]. According to Janisse [14], doctors feel the optimum experience when they are able to provide the best service to their patients.

These findings are in line with Krasner et al.[16] who explained that the application of mindful practice by mindfulness communication could increase doctors' well-being. The

quality of relationship with patients is one of the factors that influences doctors' well-being [14]. A mindful doctor is a happy doctor because he or she can better regulate his or her emotions. A mindful doctor can also perform better services and build better relationships with patients, thus, increasing patients' satisfaction. In the end, patients' satisfaction contributes to doctors' happiness and satisfaction with their work. This cycle is called the domino effect of positive feedback loops theory [14]

The comparative test indicated the highest mean of subjective well-being in the group of doctors who underwent four to six month internships. This result aligns with the standard approximate time that individuals tend to need to adapt to a new environment, which is six months [25]. Participants with one to three months' internship duration have a low level of subjective well-being. This result aligns with Ritter et al.[25] finding, which explained that individuals start to adapt to the working environment in the first to the third month. During that adaptation phase, individuals are susceptible to psychological distress (e.g., anxiety). The optimum time for adaptation is above six months because by then, they have begun to adjust and resolve conflicts.

Another finding in this study showed that the lowest subjective well-being levels occurred in doctors whose internships were of twelve months duration. In line with Sen et al. [26], the number of internship doctors with depression symptoms decreased in the sixth month of internship but increased again until the twelfth month of internship.

VI. Conclusion & Recommendations

This research proves that mindfulness has a positive role in subjective well-being doctors who are undergoing internship periods. The higher the mindfulness of an internship doctor, the higher the level of subjective well-being and vice versa.

There are several recommendations that can be proposed based on this study's findings. First, upcoming research should control the participants' conditions by determining the participants' criteria according to more detailed demographic data, such as the internship's geographical conditions and workload. Second, future research should investigate the effect of mindfulness practice training such as attentive communication training for subjective well-being and should look into pre- and post-measures for general mental health like depression and anxiety for all clinical practitioners who are in direct contact with patients or clients on a daily basis such as doctors, internship doctors, contract doctors (PTT), and nurses.

Medical institutions in Indonesia and the implementers of PIDI should emphasize more on the importance of mindfulness practice based medical practice training.

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