

The Factors of Subjective Well-being and the Mediating Role of Subjective Well-being in Work Productivity in Malaysia's Healthcare Industry: As an Example of Public Hospitals

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Abstract

This study explores the factors influencing subjective well-being and examines its mediating role in work productivity within Malaysia's healthcare industry, specifically focusing on public hospitals. As the demands on healthcare professionals, particularly nurses, continue to grow, understanding how subjective well-being impacts their work productivity is crucial for maintaining high standards of patient care. The research investigates key determinants of subjective well-being among healthcare workers, including workload, work environment, and emotional support, and how these factors collectively influence overall productivity. By analyzing the mediating effects of subjective well-being, the study aims to provide insights into strategies that can enhance both the well-being and productivity of healthcare professionals. The findings are expected to contribute to the development of targeted interventions that support healthcare workers, ensuring they are both mentally and physically equipped to meet the demands of their roles, ultimately improving the quality of care provided in Malaysia's public hospitals.

Keywords

Subjective Well-being; Work Productivity; Malaysia's Healthcare Industry.

1. Introduction

Malaysia's healthcare industry, especially public hospitals, is the most essential welfare for the nation's populace. Public healthcare plays a vital role in Malaysia's health landscape. Healthcare employees and nurses play an important role in delivering services to the public. In 2021, based on the data provided by Malaysia's Ministry of Health (MOH), more than two million patients were admitted to public hospitals compared to private hospitals, with about nine hundred thousand admitted in the same year (Zulkifli, U, Yusof, & Lin, 1994). The high number of patients has caused stress and burden on nurses in public hospitals. The nurses must work longer and increase their workload to match the number of patients needing help (Zubir et al., 2024). This can cause a significant decline in the nurses' work performance in public healthcare if there are no actions to improve their subjective well-being. According to N. A. Zakaria, Ab-Murat, and Che Musa (2022), the work performance of nurses directly affects the efficiency of health care and the level of patient care. Due to the rigorous nature of the profession, nurses feel burdened carrying a big responsibility to improve the level of patient care, causing a high prevalence of poorer mental health (N. Zakaria et al., 2023). Malaysia's healthcare system must address nurses' mental and physical exhaustion to improve their work performance. This can make the nurse feel cared for by the management or government, leading to a high commitment

to delivering the utmost healthcare service. In the Malaysian context, this research actively investigates the factors that affect the work performance of nurses in the public health sector in Malaysia.

2. Literature Review

Grounded Theory.

This study was supported by appraisal, self-determination, and job demand and resource theory. It first used the job-demand resource theory to explain the relationship between subjective well-being, work engagement, and productivity. N. Yang, Lu, and Ye (2018) employed JD-R theory to clarify the relationship between subjective well-being and productivity. The JD-R model is extensively employed to examine the complex relationships between job-related and organisational characteristics and well-being outcomes in different work environments. According to the Job Demand-Resource (JD-R) theory, the presence of job resources and job demands has an impact on many job attitudes and outcomes at the individual, team, and organisational levels in the workplace, such as work productivity (Udushirinwa, McVicar, & Teatheredge, 2022). Previous studies have incorporated personal resources as they directly influence well-being (Tummers & Bakker, 2021). The study by Tu, Huang, Sitar, and Yang (2022) investigated the relationship between personal resources, which are positive psychological attributes, and their direct influence on well-being within the JD-R framework. Per the JD-R model, an employee's productivity can be influenced by their well-being as personal resources. Also, the JD-R model was predominantly utilised to elucidate the key components that significantly influence work engagement (Singh, James, Paul, & Bolar, 2022). Shamsi, Iakovleva, Olsen, and Bagozzi (2021) employed the JD-R theory to clarify the role of work engagement on an individual's subjective well-being. According to the JD-R theory, job resources refer to the elements of a job that assist individuals in achieving the diverse requirements of the job, enabling them to achieve their objectives and promoting personal development, learning, and engagement in their work. The job requirements are the main catalyst for burnout and work-related stress. Based on the JD-R theory, each job resource can significantly enhance work engagement, while only (high) job demands are specifically linked to workplace strain and burnout.

The Job Demands and Resources (JD-R) model is a commonly employed concept that elucidates the relationship between engagement and its antecedents and consequences. The study's initial focus was on job resources and job demands, but it later broadened to encompass personal resources. These personal resources refer to self-resilient qualities that strengthen an individual's ability to influence their environment and promote personal growth. According to the model, personal resources promote higher levels of work engagement, better well-being, and improved performance. Subjective well-being is an individual asset that fosters personal advancement and progress, mitigating the adverse effects of job requirements and shaping the perception of accessible workplace resources, ultimately leading to heightened work engagement (Ouyang, Zhu, Ma, & Qian, 2022). Nurses with better work engagement will likely have a more significant relationship between their subjective well-being and productivity.

However, the JD-R primarily emphasises the interplay between job demands, resources, and their immediate psychological and physiological consequences only after adequately considering the fundamental human needs that motivate these interactions. Self-Determination Theory (SDT) is a comprehensive framework used to examine human motivation and personality. It focuses on three fundamental psychological needs: competence, autonomy, and relatedness. These requirements are universally recognised as innate and psychological, crucial in psychological development, integrity, and overall well-being. SDT can address the shortcomings of the JDR model by offering a more profound comprehension of the factors

determining whether specific job demands or resources are seen as inspiring or demotivating. SDT can elucidate the factors contributing to the efficacy or inefficacy of job resources and the perceived onus of job expectations by including fundamental psychological needs. By incorporating Self-Determination Theory (SDT) into the Job Demands-Resources (JDR) model, a deeper understanding of the underlying motivational mechanisms that influence employee engagement and productivity may be achieved. This integration offers a more comprehensive framework for enhancing employee well-being and performance within the workplace.

SDT is a motivational framework that examines explicitly how individual behaviour is expressed, whether it originates within or is impacted by external circumstances (Meirun et al., 2020). SDT has been utilised to forecast performance. Research has revealed intrinsic and extrinsic motivators and moderator variables that impact the relationship between subjective well-being and performance. The Self-Determination Theory (SDT) is extensively utilised to examine the motivational processes related to work engagement and is also employed to develop interventions for workplace settings. The current study used SDT's general causality orientations on the motivational process linking job resources and work engagement in employees in the outsourcing sector. Employees must experience a high level of engagement to carry out their essential daily activities effectively. According to the Self-Determination Theory (SDT), it has been found that meeting three essential criteria serves as a link between job resources and employee engagement in the workplace (Martínez-Díaz et al., 2023). When employees' need for autonomy, competence, and relatedness is fulfilled in the workplace, they experience a sense of engagement. This occurs when they have the freedom to make decisions about their tasks (autonomy), can utilise their skills effectively (competence), and receive positive feedback from their colleagues (relatedness). For example, one of the most prominent benefits of working in the nursing profession is the ability of nurses to depend on their colleagues for assistance, which helps to alleviate stress and lighten the load of their responsibilities. According to Self-Determination Theory (SDT), if a job resource, such as feedback, aligns with an employee's demand for competence, it is more likely to increase engagement effectively. Likewise, work requirements that clash with the desire for independence may cause increased stress and burnout. This phenomenon can be better explained by the Self-Determination Theory (SDT) compared to the Job Demands-Resources (JDR) model.

Furthermore, individual behaviours are shaped through the interplay of an individual's internal cognitions, emotions, and external surroundings (Li, Li, & Fu, 2022). An indirect influence of personal cognitive variables on behavioural aspects has been discovered regarding environmental influences.

Hence, this study used cognitive appraisal, self-determination, and job-demand resource theories to clarify the relationship between the nurses' subjective well-being, work engagement, and work productivity.

Income And Work Productivity.

There is a significant positive relationship between income and work productivity. Improving work efficiency can not only significantly increase the labor productivity and economic benefits of the enterprise, but also directly increase the income level of employees (van Vilsteren et al., 2015). This two-way relationship suggests a virtuous cycle between business and employees between productivity and compensation. First of all, improving work efficiency is the key to improving enterprise labor productivity (Nyman, Dowd, Hakes, Winters, & King, 2013). For example, by developing a clear work plan, prioritizing and focusing, you can effectively shorten task completion time and improve overall work effectiveness. This not only creates higher economic benefits for the company, but also brings better income returns to employees. In other words, improvements in work efficiency directly drive employee income growth.

Secondly, wage levels have a significant impact on employee work efficiency and productivity. Efficiency wage theory points out that there is a two-way mechanism between wages and productivity, that is, employees with high productivity should receive higher wages, and higher wages can motivate employees to further improve productivity. Research shows that reasonable planning of salary levels for different positions within an enterprise can not only improve work efficiency, but also enhance the core competitiveness of the enterprise, ultimately achieving a win-win situation for the enterprise and its employees. In addition, welfare benefits, as part of employee income, also have a direct impact on work efficiency and productivity. Providing comprehensive benefits, such as health protection plans, training opportunities and promotion channels, can not only improve employees' job satisfaction, but also stimulate their enthusiasm for work, thereby further improving work efficiency and productivity. A good working environment and high levels of employee satisfaction are also important factors in promoting work efficiency (Donnelly, Gordon, & Bowling, 2020).

From a macro level, the improvement of labor productivity is directly related to the growth of per capita income level. Research shows that the higher the labor productivity, the higher the per capita income. For example, even though the United States has experienced economic recession and major event shocks, its continued growth in labor productivity has still ensured a steady increase in per capita income. This shows that labor productivity is an important factor in promoting per capita income growth and is also the core driving force of economic development. In summary, there is a strong positive relationship between income and work productivity. Improving work efficiency can not only improve the economic benefits of the company, but also directly increase the income level of employees. In order to achieve the common development of enterprises and employees, enterprises should improve employees' work efficiency and productivity by formulating reasonable work plans, providing rich benefits and optimizing the working environment, so as to achieve a win-win situation (Cabral et al., 2017).

Occupational Stress and Work Productivity.

The relationship between occupational stress and work productivity is multifaceted and complex. On one hand, moderate levels of stress can serve as a catalyst for employees, stimulating their potential, enhancing efficiency, and fostering creativity, which can lead to improved performance. However, excessive occupational stress can have the opposite effect, negatively impacting an employee's work performance (Zhou et al., 2024). This can result in decreased productivity, impaired concentration, and diminished memory. Research indicates that factors such as time pressure, work overload, role ambiguity, and role conflict can all adversely affect employee performance. Effective management of occupational stress is crucial in helping employees better cope with challenges, thereby enhancing work efficiency and productivity (Shiratsuchi, Motohiro, Okuyama, & Abe, 2024). For instance, setting clear goals and plans, and providing employees with a well-defined focus and direction can reduce unnecessary anxiety and stress, leading to improved work efficiency. Additionally, time management strategies-such as prioritizing tasks, avoiding procrastination, maintaining good time management habits, and staying focused-are also key to boosting productivity (Shaholli, Mantione, & La Torre, 2023).

Nevertheless, prolonged exposure to occupational stress can lead to issues such as fatigue, impaired concentration, and memory loss, all of which can detract from an employee's work performance. Studies have shown that occupational stress not only leads to reduced work efficiency but can also result in health problems such as hypertension and insomnia, further impacting work productivity (Quinn, Bruehwiler, Chanter, & Barone Gibbs, 2024). Therefore, it is imperative for companies to implement effective stress management strategies. These might include providing stress management training, optimizing the work environment, and offering health support to help employees cope with occupational stress and enhance work

productivity (Pigini et al., 2023). Furthermore, companies should prioritize employee health and work-life balance to boost employee motivation and satisfaction, which in turn can lead to increased overall productivity (McCubbin, Irwin, & Costa, 2024).

Subjective Well-being.

The subjective well-being of nurses is influenced by various factors, including spiritual leadership, job satisfaction, professional identity, work engagement, coping styles, and academic stress and highlighted the significant influence of spiritual leadership on the subjective well-being of Chinese registered nurses (Zautra & Hempel, 1984). The previous study also found that job satisfaction, psychological well-being, and subjective well-being levels differed significantly according to the nurses' level of education and years of nursing service (Z. Yang et al., 2022). They additionally emphasise the relationship between professional identity, psychological reward satisfaction, and subjective well-being among Chinese nurses (Y. Yang, Zhao, & Cui, 2022). These findings underscore the multifaceted nature of subjective well-being among nurses, influenced by both intrinsic and extrinsic factors. Moreover, the study highlighted the increasing focus on nurses' well-being due to its close relationship with nursing performance and management (Wang, Zhao, Shen, & Jiang, 2023).

Additionally, this study emphasised a significant relationship between academic stress, resilience, and subjective well-being in graduate nursing students (Sheng et al., 2023). These findings underscore the importance of addressing work-related factors and academic stress in promoting nurses' well-being. Furthermore, the study by Urban et al. emphasised influence of professional values, career expectations, and self-efficacy in the occupational well-being of male nurses in China (Molina-Sánchez, Ariza-Montes, Ortiz-Gómez, & Leal-Rodríguez, 2019). This highlights the gender-specific aspects of well-being within the nursing profession.

H1: There is a significant positive mediating role of subjective well-being in work productivity.

H2: There is a significant positive effect in the relationship between Income and Work productivity.

H3: There is a significant positive effect in the relationship between Occupational Stress and Work Productivity.

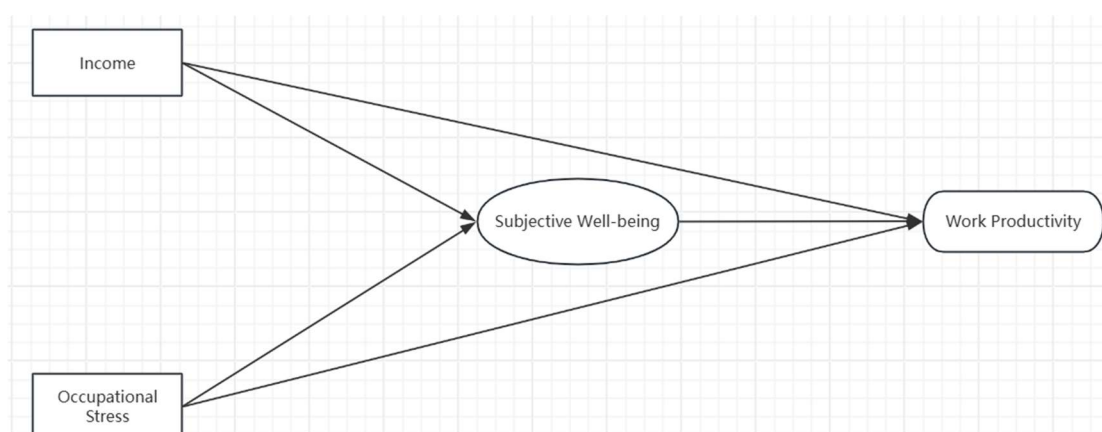


Figure 1. Research Framework

3. Methodology

Population and Sample.

Based on the official website of "Kementerian Kesehatan Malaysia" showed that there are four public hospitals in Kuala Lumpur, which are Hospital Kuala Lumpur, Hospital Rehabilitasi Cheras, Tunku Azizah (Wanita et al.) and Institut Perubatan Respiratori. The Kuala Lumpur

Hospital (HKL) is the largest public general hospital in Kuala Lumpur, which the Malaysian government owns. HKL, established in 1870, is a non-profit organisation that acts as the main hospital in the Malaysian public healthcare system. Hospital Kuala Lumpur is now the most significant healthcare facility managed by the Ministry of Health in Malaysia and is widely recognised as one of the largest in Asia. The hospital is a government tertiary referral facility on 150 acres of valuable property. HKL comprises a total of 54 different departments and sections. There are a total of 29 clinical departments and 15 clinical support services. It consists of 83 wards and has a total of 2300 beds. HKL employs almost 11,000 personnel, including nearly 2,300 experts across several fields and specialities. The team comprises 300 medical consultants and specialists, 1,300 medical officers, 72 matrons, 253 sisters (ward administrators), 3,500 registered nurses, and 258 community nurses.

Hospital Rehabilitasi Cheras (HRC), opened in 2012, pioneered Malaysia's comprehensive rehabilitation services. It features a high-tech rehab gym and hydrotherapy pools. HRC, operated by the Ministry of Health Malaysia, is Southeast Asia's first and largest rehabilitation hospital. It won the 2016 World Stroke Campaign Award, making it the first and most prominent in the region to offer physical rehabilitation services.

Tunku Azizah Hospital (HTA), formerly known as Hospital Wanita dan Kanak-Kanak Kuala Lumpur, is a specialised medical facility that provides advanced care in Paediatrics, Obstetrics, and Gynaecology. Malaysia is a central location for clinical research in paediatrics, obstetrics, and gynaecology. HTA recently commemorated the arrival of 19 infants on Malaysia's 66th Merdeka Day. The hospital functions as a tertiary referral facility, receiving referrals from around the country for various subspecialties. HTA functions as a teaching facility for physicians and other healthcare practitioners, providing educational programs at both the undergraduate and master's levels. The hospital also accommodates clinicians participating in programs such as MRCPCH and MRHOG. Nurses and allied health officials are also involved in advanced diploma programs. The Clinical Research Centre (CRC) of HTA, inaugurated in October 2019, is the 35th of its kind in the nation. Its primary role is to facilitate research endeavours within the health centres of the Ministry of Health (MOH).

The Institut Perubatan Respiratory (IPR) was founded in 1958 as a Ministry of Health Malaysia subsidiary. It is situated in Jalan Pahang, Kuala Lumpur. Its respiratory medicine and trauma treatments are widely recognised.

The researcher would include nurses from Hospital Kuala Lumpur, Hospital Rehabilitasi Cheras, Tunku Azizah (Wanita et al.) and Institut Perubatan Respiratori.

4. Data Analysis

To examine the direct relationships among the research constructs, multiple regression analysis was used. The method was employed to examine the mediating effect. The multiple regression technique provides an opportunity to explore the relationships among a set of independent variables and a dependent variable (Uplekar et al., 2013). In order to use multiple regression, several assumptions must be met. First, the tolerance values for all research constructs must be greater than 0.10, and the variance inflation factor (VIF) values must be less than 10, to avoid the problem of multicollinearity (Tomasallo et al., 2018). Second, the data must be normally distributed. Through SPSS calculations, all these conditions were met, and the hypotheses in this study were confirmed and validated.

To test the hypotheses of this study, multiple regression analysis was used. The detailed information is shown in the table below. The table indicates that workload and work hours both have a significant positive impact on subjective well-being, with a significance level of $p \leq 0.05$. According to the data, these listed variables and relationships together explained about 8% of the variance in subjective well-being, based on the adjusted R^2 value. The F-value was 8.224

and significant at $p \leq 0.05$. Furthermore, subjective well-being also explained 9% of the variance in work productivity in this relationship, also based on the adjusted R^2 value. The F-value was 9.114. Therefore, the hypothesis in this paper, namely, "H1, H2, H3" is supported.

5. Conclusion and Suggestions

This study explored the impact of income and occupational stress on employees' subjective well-being in the context of Malaysian public hospitals, as well as the mediating role of subjective well-being in work productivity. The research model is shown in the figure, revealing the complex relationship between multiple key variables: income, occupational stress, subjective well-being, and work productivity.

First, the study showed that income has a direct positive impact on employees' subjective well-being and work productivity. Higher income can not only improve employees' quality of life and psychological satisfaction, but also motivate them to be more active and efficient at work. This positive effect further promotes employees' work productivity.

Second, occupational stress, as another important variable, has a negative impact on subjective well-being and work productivity. Moderate stress can stimulate employees' potential and improve work efficiency, but excessive occupational stress will lead to a decrease in employees' subjective well-being, which in turn affects their work performance. Employees in a high-stress environment are more likely to experience problems such as fatigue and lack of concentration, thereby reducing overall work productivity.

The study also deeply analyzed the mediating role of subjective well-being between income, occupational stress and work productivity. Subjective well-being is defined as the overall satisfaction and mental health status felt by an individual in work and life. In this study, subjective well-being is not only directly affected by income and occupational stress, but also significantly affects work productivity. Specifically, higher subjective well-being can effectively improve employees' work productivity, while lower subjective well-being may lead to a decrease in work efficiency.

Through multiple regression analysis, this study confirmed the importance of subjective well-being as a mediating variable. Income can indirectly improve work productivity by improving subjective well-being, while occupational stress may indirectly inhibit work productivity by reducing subjective well-being. Therefore, when formulating relevant strategies, managers should focus on how to improve employees' subjective well-being, such as maximizing employees' work productivity by increasing income, providing a good working environment, and reducing unnecessary stressors.

In summary, this study revealed the significant impact of income and occupational stress on subjective well-being, as well as the mediating role of subjective well-being in work productivity. This finding provides valuable reference for managers of the Malaysian medical industry, especially public hospitals, which will help them further improve the overall productivity of the organization while improving employee well-being.

Acknowledgments

Authors would like to acknowledge the partial financial support from the 2024 Hainan Province Health Science and Technology Innovation Joint Project (WSJK2024MS204) and The First Affiliated Hospital of Hainan Medical University research team.

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