

Is well-being everything? Direct and indirect effects of stress and workplace bullying in the Covid-19 pandemic

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ABSTRACT

The study investigates the relationship between workplace bullying, stress, and employee well-being, focusing on the mediating role of stress in this dynamic. Using a cross-sectional survey of 310 employees in the Malaysian banking sector, analyzed through structured equation modeling (SEM), the findings reveal that workplace bullying directly elevates stress levels, which in turn adversely affects well-being. Furthermore, stress serves as a significant mediator between workplace bullying and well-being. The research provides implications for organizations and practitioners by bringing out the effects of workplace bullying and stress on the employee. This research assumes more importance in light of COVID-19, as changes in workplaces and the existing level of uncertainty have aggravated the psychological pressures across the world affecting the well-being of employees considerably. Analyzing the research from the psychological and managerial points of view, this research enhances overall knowledge about psychosocial working conditions and provides guidance for management to enhance ways of preventing workplace bullying and increasing staff members' well-being, especially in crisis periods.

1. Introduction

Undoubtedly, the COVID-19 pandemic has brought to light the importance of work in determining the health and well-being of populations (Cheikh Ismail et al., 2021; Kaltiainen & Hakanen, 2024). By applying a multilevel systems perspective, this viewpoint helps to understand how the pandemic has accelerated trends in employment and working conditions that have impacted worker health and well-being (Krug et al., 2021; Luo et al., 2025). Currently, organizations are facing challenging circumstances, particularly regarding human resources management. Remote work and modified workplace policies and procedures are causing radical changes in the work and social environments (Schifano et al., 2023). Work-life balance has become more difficult, separating work and private life has become harder, and there are even psychosocial risks like isolation for workers. As a result of the pandemic, job redistribution has been accelerated. Up to 25 % of workers

worldwide will have to change occupations or choose to change careers by 2030 (Peters et al., 2022).

Economic growth is supported by the banking sector, which plays an important role in the country's development. Due to the importance of the banking sector in various contexts, scholars have always been interested in this sector (Galletta et al., 2022). Employee well-being is crucial because 'happy workers are productive workers' is an acknowledged fact. Employee well-being not only plays a significant role in job performance but also in a bank's profitability. In Malaysia, however, organizations are generally oblivious that employee well-being poses a significant challenge for all of them, particularly for organizational employees in the banking sector. (Arshad et al., 2023; Jain et al., 2025). As the banking sector in Malaysia is facing an extremely competitive environment today, employers must take good care of their employees to stay competitive. To increase the productivity of the employees, banks must identify all the factors that can contribute to the well-being

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of the staff at work to increase the productivity at the workplace during the normal operations period and in the post-pandemic era. Stress is a common problem in the banking sector of Malaysia, where employees are often required to work long hours and deal with high-pressure situations (Aziz & Long, 2023). Chronic stress can lead to various physical and mental health problems, including anxiety, depression, and burnout. Workplace bullying can harm employees' mental health and well-being, which can, in turn, impact their productivity and job satisfaction. In the banking sector of Malaysia, where employees often work long hours and are under significant pressure to meet targets and deadlines, bullying can exacerbate stress levels and increase turnover rates (Tubussum et al., 2024).

A significant majority of emerging nations in Asia are not conducting enough research on the topic of psychosocial work conditions in the workplace and are not giving it enough attention (Abiddin et al., 2022; Olonisakin & Idemudia, 2022; Rahman et al., 2017). Because the predicament has become so precarious, a great number of companies, including those that provide their employees with a high-quality working environment, are less likely to be interested in assisting their employees in coping with their mental health issues while they are at work (Amoadu et al., 2023). Whether or not these organizations are aware of this issue, it can be assumed that they are aware of it or do not care. It has also been shown that many psychosocial factors affect psychological wellness and are often linked to quantitative, emotional, work-family, job instability, individual traits, coping mechanisms, and resources at the individual and organizational levels. Well-being can include satisfaction with different parts of life, such as leisure activities, family and social lives, and work-related things like salary, promotion, coworkers, and personal well-being. Sonnentag et al. (2023) emphasize employees' psychological and physical well-being within the behavioral sciences. Identifying what aspects of work may affect the quality of life at work plays a crucial role in identifying the areas of work that directly impact the employee's well-being (Sonnentag et al., 2023). It is vital to conduct research relating to such problem-solving environments to address the current issue of poor psychosocial work environments and employee fears of reporting problems (Islam & Chaudhary, 2024).

A rising sense of workplace stress along with psychological risk factors among staff members has become evident in Asian countries (Olonisakin & Idemudia, 2022; Tubussum et al., 2024). Kang and Kaplan (2019) say that gender and stereotypes are still one of the biggest problems keeping the profession from growing. It has been demonstrated that workplace bullying (WPB) is one of the most important factors that negatively affect employees' ability to function at their optimal level and is common and relatively subtle but critical. Its effect increases poor health, stress, and attrition among employees. According to Ahmad et al. (2021), bullying is generally attributed to a poor psychosocial work environment that provides an ideal environment for bullying. A study conducted by Greenberg et al. (2020) examined the management of mental health challenges faced by workers during the COVID-19 pandemic in the workplace. It recommended that employees proactively provide psychological support to one another by providing psychological well-being to each other and the organization.

There have been many developments in JD-R models over the last couple of decades. However, the most notable is the advent of the JD-R model (Demerouti et al., 2001) and the JD-R theory (Bakker et al., 2014). These advancements have seen a significant uptick in popularity for the past few years among scholars. The JD-R categorization method divides jobs into two categories, the demands of the job, on the one hand, and the resources available on the job, on the other. These categories are based on the jobs' traits and qualities. There are many physical, psychological, social, or organizational aspects associated with a job, all of which contribute to the stress rate is increased on the job as a result of increased psychological, cognitive, or emotional demands (Michie, 2002; Van Woerkom et al., 2016). One of the most important aspects of a job is its ability to pay. These include high workload, bullying, quantitative and emotional demands, complex tasks, conflicts,

unfavorable working conditions, and irregular work hours. If the job demands require high effort, and the employee cannot recover, they could become job stressors. Employee energy is depleted due to job demands. In addition to the physical aspects of the job, the job resources are the psychological aspects of the job that will assist employees in achieving their goals, will reduce employment demands, and will stimulate their personal development, learning, and learning of the job (Bakker & Demerouti, 2007). However, *job resources* are defined as those aspects of work that help employees meet their goals and work demands effectively. A few of them include self-determination, creating a conflict-management environment, improving employee performance feedback, and socializing with coworkers. An employee's basic psychological needs are satisfied by these motivating job characteristics. Both job demands and resources influence employee well-being. Demerouti and Bakker (2023) find that job opportunities motivate and contribute positively to an employee's health and well-being, even though the job demands may adversely affect health and well-being.

Workplace bullying continues to emerge as a major issue which impacts both employee health and organizational performance worldwide. The prevalence rates of workplace bullying in Malaysia show different levels of occurrence based on sector analysis (Farley et al., 2023; Awai et al., 2021). A research study with 47 Malaysian companies discovered that workplace bullying affected 39.1 % of 5235 participants according to Chan et al. (2019). The research by Samanthar et al. (2022) showed that bullying happened frequently to 14 % of 231 employees working in public and private sectors (Samanthar et al., 2022). The Malaysian banking sector lacks sufficient research which investigates its specific bullying dynamics. Workplace bullying appears more likely to target employees in the banking sector because of its intense performance-driven environment along with its strict performance metrics and systemic hierarchical structure.

This study aims to determine the effects of psychosocial job demands, as well as the job resources associated with jobs in the banking sector, on the well-being of banking employees and, indirectly, on the psychosocial health of banking employees. The research is based on the JD-R. The study has two primary aims. The first investigates the direct relationship between workplace bullying, stress, and employee well-being. The second aim is to explore the mediating role of stress in the relationship between workplace bullying and employee well-being.

2. Literature review

2.1. Workplace bullying and stress

Workplace bullying is called "workplace bullying" when an employee is treated aggressively and negatively (Jang et al., 2023). The victim can suffer severe harm and social stress from humiliation, intimidation, punishment, or fear of the perpetrators (Einarsen et al., 2009). Physical and psychological health problems are caused by bullying in the workplace (Ahmad et al., 2022). As a result, employees have low morale, a negative mood, and legal problems due to bullying, all of which demonstrate that bullying is a cause of stress for employees and makes them less productive. Farley et al. (2023) have found several consequences of workplace bullying. In three categories, authors divide costs according to their impact on people, organizations, and spillovers/crossovers. PTSD symptoms and emotional distress are all considered human costs (Matheson et al., 2019), including sleeping disorders, emotional disorders, and even symptoms of emotional distress. Secondly, there is the cost associated with the organization. Whenever bullying victims are attacked, it causes a decrease in job satisfaction and a rise in absenteeism, resulting in decreased productivity and performance at work. Psychological and physiological stress reactions caused by bullying in the workplace have been associated with substance abuse, sickness absence, sleep problems, and thoughts of suicide (Chaudhary & Islam, 2023; Hogg et al., 2012). "Job stress" refers to tension caused by a worker's inability to balance work and family demands (Nart & Batur,

2014). A high level of absenteeism and injuries usually result from this situation. Occupational stress can also be called job stress, caused by workplace tasks and associated factors (Dilekçi et al., 2025). Others believe it is a response variable, but many believe it is a stimulus variable. Many scholars believe that job stress results from the environment, individual interactions, and some factors within that environment (Biggio & Cortese, 2013; Ojo et al., 2021).

According to Attell et al. (2017), a study examined the relationship between workplace bullying and stress, and stress negatively impacts stress levels in individuals. A similar study was conducted by Vranjes and Baillien in 2018 in Belgium to explore employment opportunities in the private and public sectors of the country. This study used cross-lagged panel designs to investigate the positive relationship between bullying and stress. Furthermore, in another study, they hypothesized that bullying and PTSD were positively related across all European school levels across a range of school levels. There was a 49 % bullying rate in the low educational level, a 60 % stress level in the medium educational level, a 33 % bullying rate in the medium educational level, a 27 % stress level in the high educational level, and a 13 % bullying rate and 13 % stress level in students with a higher educational level (Islamowska et al., 2018). An analysis of two waves of longitudinal data was analyzed using CB-SEM to analyze 215 branch office employees of five commercial banks who participated in the study. Research has found that workplace bullying is positively correlated with stress in the workplace (Malik et al., 2018).

Hypothesis 1. (H1): There is a positive correlation between workplace bullying and stress at work.

2.2. Workplace bullying and well-being

The JD-R theory provides a unifying lens to understand how workplace bullying may harm employee well-being. This theory has its roots in the literature on psychological stress (Hobfoll, 1989). WB is generally defined as “situations where a person is repeatedly, and over a period of time exposed to negative acts on the part of co-workers, supervisors, or subordinates” (Mikkelsen & Einarsen, 2002, p. 397). Einarsen et al. (2009) specified it as negative acts of physical terrorizing and harassing practices caused by individuals due to personal and occupational reasons (Firdaus et al., 2025).

According to Nielsen et al. (2024) research, people who observe bullying at work develop negative health problems as well as wellness problems such as stress, anxiety and depression. Psychological health of bystanders gets negatively affected by any form of exposure to bullying. Another study was conducted in Taiwan to examine the moderating impact of organizational justice on workplace bullying and employee well-being. They proposed a negative relationship between workplace bullying and well-being. It was found that workplace bullying harmed employees' well-being (Hsu et al., 2019). In addition to that, Wang et al. (2024) discovered that workplace bullying increases compulsory citizenship behavior in employees through anger mediation. Workplace bullying creates negative impacts that harm employee well-being along with their performance. The study revealed that workplace bullying significantly negatively affects job satisfaction and nurses' well-being due to the social working environment (Finchilescu et al., 2019). In a recent investigation of the relationship between well-being and bullying, she concluded that well-being and workplace bullying are negatively related in a suburban and urban school environment (Heydenberk & Heydenberk, 2017). Finally, Neto, Mariana in Portugal, surveyed employees of a service company. The result showed that workplace bullying strongly impacts the loss of psychological well-being (Farley et al., 2023; Neto et al., 2017). In light of the arguments mentioned above, the researcher hypothesizes the following:

Hypothesis 2. There is a negative relationship between workplace bullying and wellbeing in the workplace.

2.3. Stress and well-being

An important component of job well-being is the interaction of multiple resources and stressors within the employee environment (Özer & Escartín, 2023). According to Demerouti et al. (2001), job resources and stressors combine to explain the positive and negative dimensions of an individual's occupational well-being. According to Demerouti et al. (2001), stress is physical or psychological stress caused by the prolonged effort or skill required to perform one's job. Job resources, like physical and psychological resources, can reduce or eliminate stressors and their consequences (Demerouti & Bakker, 2023). In contrast to the previous job demands-resources models (Karasek, 1979; Folkman, 2020), the effort-reward imbalance model (Siegrist, 1996), and the demand-control model of stress and coping, the job demands-resources model differs from previous models because it does not restrict itself to the negative dimension of well-being or stressors or resources that affect individuals. In a similar model to the previous one, stress is also seen as a result of the employee's current stress levels outweighing the resources available at work (Zhang, 2025). As a result, prior studies suggest that an imbalance in stressors and resources predicts well-being, which suggests they are worth investigating together. Stress has consistently been associated with a negative effect on well-being, which has been consistently demonstrated.

In particular, stress can lead to loneliness, negatively impacting interpersonal relationships (Billah et al., 2023). In addition to impairing physical health (Denton et al., 2004; Thorsteinsson & Brown, 2009), stress has also been shown to have a depressant effect, a phenomenon demonstrated by a higher level of depression symptoms (Alwhaibi & Al Aloola, 2023; Chou, 2012). The impact of stress on well-being was also studied in a study conducted in the USA, which examined the circumstances under which the stress rate is likely to decrease, and the well-being rate is likely to increase under what circumstances (Grossi et al., 2019). The study found that improving well-being was related to reducing stress levels. Thus, we can say that there is an inverse relation between the two variables.

Similarly, Kramer et al. (2019) conducted a longitudinal research study under the Earned Income Tax Credit that examined the relationship between stress and well-being. Stress negatively impacted employee well-being based on the study results (Kramer et al., 2019). It is also worth noting that another study researched psychological problems that students face as a result of experiencing multiple stresses due to their academic environment (Recabarren et al., 2019). In light of the arguments mentioned above, the researcher hypothesizes the following:

Hypothesis 3. Stress and wellbeing are negatively correlated.

Hypothesis 4. The relationship between workplace bullying and wellbeing is mediated by stress.

3. Research framework

The following conceptual model is presented in light of the research conducted for this study, which combines theoretical underpinnings, empirical findings, analytical support, and an examination of relevant literature. All of these elements help form the model's foundation. The phenomenon of workplace bullying encompasses three dimensions: work-based bullying behavior (WRB), interpersonal bullying behavior (WPRB), and bullying behavior that involves physical and verbal abuse (WPIB). On the other hand, stress and well-being are unidimensional constructs. The study proposes three direct hypotheses and one mediating hypothesis. Fig. 1 illustrates the research framework based on the above discussion.

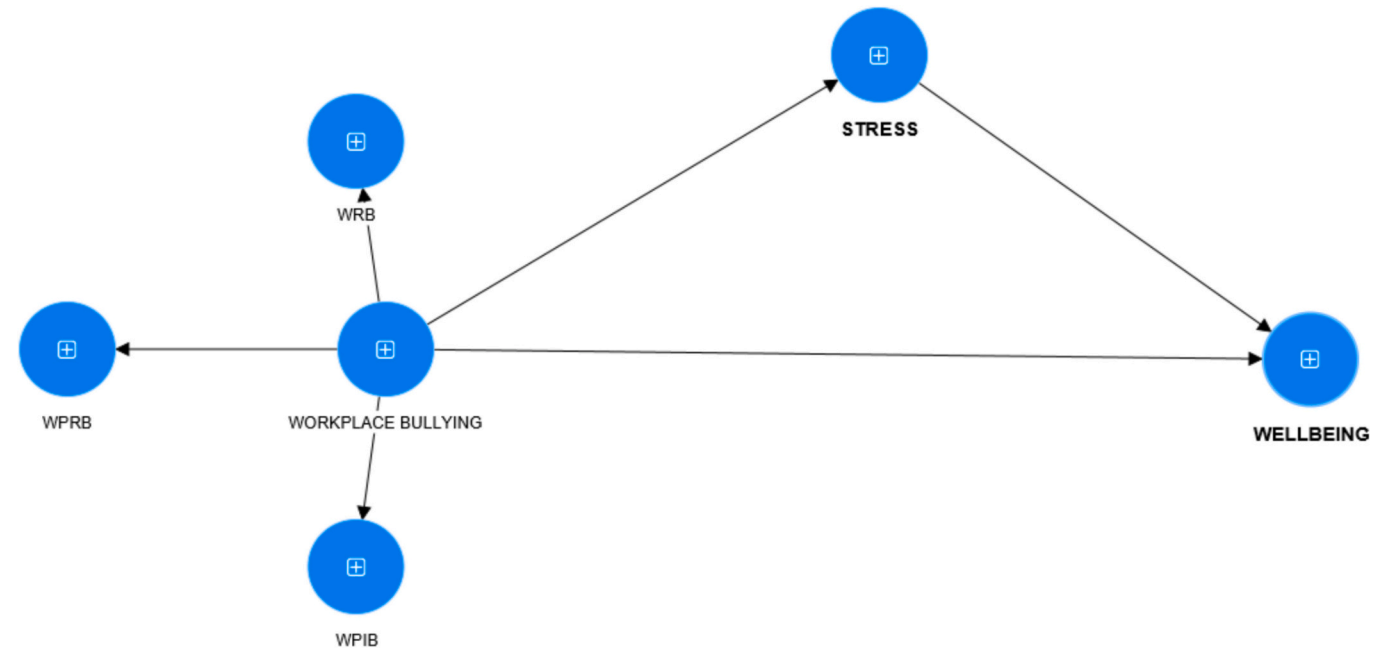


Fig. 1. Research framework.

4. Research design

4.1. Measurements

Einarsen et al. (2009) developed a scale for workplace bullying comprising 22 items and three dimensions. The WRB consists of seven items, the WPRB consists of twelve items, and the WPIB consists of three items. The composite reliability for the constructs was 0.896. In simple terms, stress is a state that results from a significant shift in an individual’s natural equilibrium (a feeling of intense pain, sorrow, or anguish, or a feeling of being breathless). A 5-item scale designed by O’Sullivan (2011) was used to determine the level of stress that was experienced. The composite reliability for the constructs was 0.842. An individual’s well-being refers to his or her willingness to be in a good and satisfactory condition of existence, including good health, happiness, and the possibility of material happiness. This is measured through the 5 items adopted from Nielsen and Randall (2009). The composite reliability for the constructs was 0.913.

4.2. Questionnaire design

This section elucidates the items used to measure the study variables. The questionnaire is divided into three sections: a cover letter (ensuring confidentiality) containing the title and objectives of the study, a consent form for the respondent, and general information about the organization. Then, the second section seeks to inquire about the demographic profile of respondents. The third section is assigned to each study variable. In this study, the endogenous variable is well-being, while the exogenous variables are workplace bullying and stress. The closed-ended format was used for the questions since it enables the respondents to make quick decisions by choosing from the available choices. In addition, the information gathered from the closed-ended questions can easily be recorded, thus facilitating the researcher’s data analysis (Alam, 2021). Respondents carefully checked the boxes next to each question and completed the questionnaire. The seven Likert scales used for each question are inscribed in each box.

4.3. Pilot study

In the current investigation, a preliminary survey, known as a pilot study, is conducted in advance of the primary survey in order to validate and verify the entire questionnaire (Kothari, 2004). As a result, the validity and reliability of the questionnaire were evaluated through a pilot research project involving a total of 35 banking employees. The experts in the relevant subject were given the whole questionnaire so that it could be discussed with them. This was done to determine the validity of the instruments’ content. Validating the content is an important step that must be taken before the final data gathering. No major concerns were found during the phase where the content was validated. After assessing the validity of the questionnaire, the researcher further looked into the instrument’s internal reliability to determine whether or not it was suitable for use in this investigation. According to the findings of the reliability tests, all of the constructs that were investigated produced results that met with acceptable levels of internal consistency, as shown in Table 1.

4.4. Sampling and data collection procedure

The research gathered data through employee participation from Malaysian banking institutions which included both public and private sectors. The study obtained a list of bank branches from bank headquarters before distributing the online questionnaires to branch managers for staff distribution. The research invited 500 workers to complete the study questionnaire. The convenience sampling technique was used for sample selection by choosing participants according to their readiness to take part and their availability. The convenience sampling method proved suitable considering the obstacles created by COVID-19 pandemic constraints on direct data collection. The quick and easy data collection process of convenience sampling produces results

Table 1
Pilot study results.

	Cronbach alpha (CA)
Well-being	0.864
Stress	0.875
Workplace bullying	0.903

but researchers should be aware that sampling bias can decrease the study’s ability to generalize findings. The research received 340 completed questionnaires from the 500 distributed surveys. The researchers cleaned the data thoroughly and kept 310 usable questionnaires for their analysis. Therefore, for this study, 62 % of valid responses were received.

5. Analysis and results

Multiple regression analysis was performed using PLS-SEM. Using Smart-PLS 4, the measurement model and structural model were assessed. The data analysis was conducted using a PLS-SEM approach; a method recommended and used by previous researchers (Arshad & Arshad, 2018; Fu et al., 2021; Sarstedt et al., 2017). For this study, 500 samples were bootstrapped, and the significance level was 5 % using PLS bootstrapping. A *bootstrap method* is a statistical approach that may estimate quantities about a population by taking the average of the estimates obtained from several different tiny data samples (Becker et al., 2023).

5.1. Measurement model assessment

The procedure of analyzing the Smart-PLS model to see whether or not it is appropriate and valid for use in evaluating the concepts of bullying in the workplace, stress, and employee well-being. To ensure that the study’s results reflect the ideas being looked into, the constructs must be valid and reliable (Fig. 2).

The researchers looked at the Composite Reliability (CR) and Cronbach Alpha (CA) values to determine the degree to which the constructs could be relied upon. A CA value of 0.734 was assigned to the WEB construct, and a CR value of 0.860 was assigned. A CA value of 0.863 and a CR value of 0.846 were assigned to the stress construct. As seen in Table 2 and Fig. 3, the workplace bullying construct has a CA value of

Table 2
Reliability and validity.

	CA	CR	AVE
Well-being	0.734	0.860	0.677
Stress	0.863	0.846	0.591
Workplace bullying	0.815	0.847	0.583

0.847 and a CR value of 0.815. These data support the hypothesis that the measurements utilised in the investigation were accurate and trustworthy.

However, more than reliability is required to measure the constructs appropriately. The researchers looked at the convergent as well as the discriminant validity of the conceptions to determine whether or not they were reliable. The term “convergent validity” refers to how well a latent construct can explain the variance of its indicator. According to Becker et al. (2023), the variance explained by each concept should be less than or equal to 0.50 (AVE 0.50).

As shown in Table 1, the AVE values for employee well-being were 0.677, those for stress in the workplace were 0.591, and those for bullying in the workplace were 0.583. According to these values, all constructs have reached the necessary level of convergent validity and are reliable and consistent. In a nutshell, the concepts that are being researched are accurately reflected by the measurements that are being employed in the study (Becker et al., 2023).

The measure of discriminant validity (DV) represents “the extent to which a construct is truly distinct from other constructs by empirical standards” (Sarstedt et al., 2017, p. 115). A key component of construct validity is discriminant validity, which ensures that a measure examines what it is designed to test and is unaffected by other factors or constructs. Discriminant validity is evaluated by determining how different a construct’s indicators are from those of other constructs. The Fornell-Larcker criteria and the Heterotrait-Monotrait (HTMT) correlation ratio are frequently used criteria for discriminant validity.

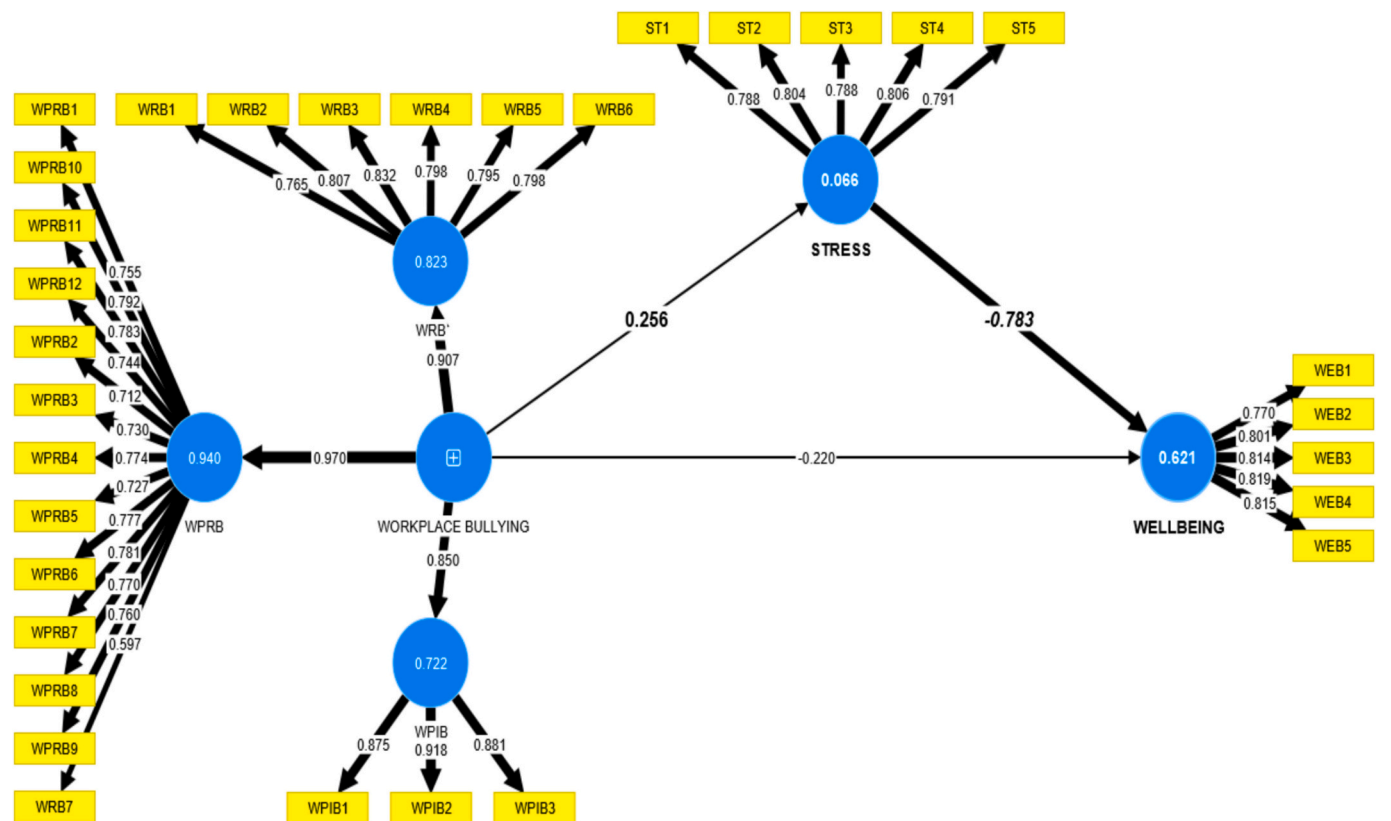


Fig. 2. Measurement model.

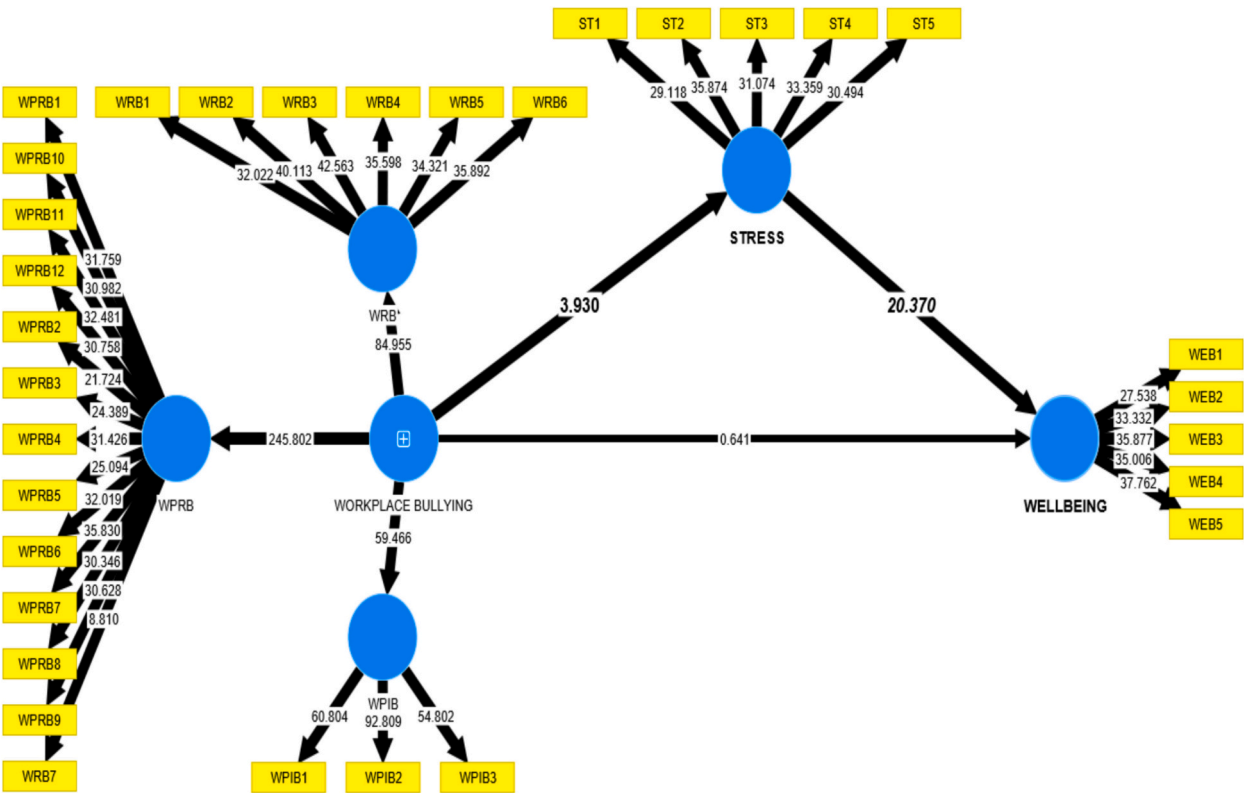


Fig. 3. Structural model.

The foundation of the Fornell-Larcker criteria is that the variation shared by two constructs should be less than the variance unique to each construct. In other words, a construct's indicators should have higher correlations than other constructs. The square root of the average variance extracted (AVE) for each construct must be larger than its correlation with every other construct in the model to satisfy the Fornell-Larcker criterion for discriminant validity. By contrasting the correlation between the indicators of various constructs with the average correlation among constructs, the HTMT ratio evaluates discriminant validity. For the HTMT ratio to satisfy the discriminant validity requirement, it must be smaller than 0.85.

These criteria evaluate how different a construct's indicators are from those of other constructs. If the requirements are satisfied, the construct is unique and can be used to measure a special notion.

Consequently, Table 3 implies that the correlation between the latent variables is larger than the square root of AVE, indicating valid discriminant validity. It shows that “the square root of AVE (diagonal) is higher than the correlations (off-diagonal) for all reflective constructs” (Sarstedt et al., 2017, p. 115).

The two commonly used criteria for assessing HTMT values are outlined by Harlow (2023) and Gold et al. (2001). These two criteria have cut-off points for the HTMT that are 0.85 and 0.90, respectively. Considering the above-mentioned criteria, it is evident that the values in Table 4 have met the requirements for the Heterotrait-Monotrait Ratio of Correlation (HTMT) method that have been established above.

Table 3
Fornell-Larcker criterion.

	1	2	3
Well-being	0.747		
Stress	0.714	0.824	
Workplace bullying	0.529	0.523	0.772

Table 4
HTMT criterion.

	1	2	3
Well-being			
Stress	0.749		
Workplace bullying	0.556	0.773	

5.2. Structural model assessment

In PLS-SEM, interrelationship estimates between independent latent variables and dependent variables are used to evaluate whether the model's predicted values will accurately predict future sample responses. In the case of structural models, bootstrapping is a non-parametric test of significance used to test the significance of the t-values of the path coefficients.

After obtaining the measurement model's parameters, we then evaluated the structural model parameters. According to Breiman and Friedman (1985), the coefficient of determination (R²) explains the variation of endogenous variables accounted for by independent variable constructs. Peng and Lai (2012), indicate specific ranges, 0.19, 0.33, and 0.67, respectively, indicating weak, moderate, and substantial effects of the coefficient of determination (R²). The present study explains that the calculated value of R² is 0.621 (well-being) and 0.537 (stress), as shown in Fig. 3, which reaches moderate standard criteria of assessment (Peng & Lai, 2012), which means that independent variables explain 62.1 % and 53.7 % of the variance, respectively, towards the dependent variables, i.e., well-being and stress.

5.2.1. Testing the direct effect

At a significance level of 5 %, bootstrapping in Smart-PLS was conducted to examine “P-values” and “T-values” hypotheses tests, which are path coefficients. Specifically, Fig. 3 and Table 5. show the hypotheses results; H1 found a positive correlation between workplace bullying and

Table 5

Direct hypothesis testing.

	Hypo	Beta	T-value	P-value	Remarks
H ₁	Workplace bullying - > Stress	0.256	3.930	0.000	Supported
H ₂	Workplace bullying - > Well-being	0.019	0.641	0.261	Not supported
H ₃	Stress - > Well-being	-0.783	20.370	0.000	Supported

Stress at work. ($\beta = 0.256$, T-statistics = 3.930, p -value < 0.01); H2 found that *there is no negative relationship between workplace bullying and well-being in the workplace* ($\beta = 0.019$, T-statistics = 0.641, p -value > 0.01); H3 found that Stress and well-being are negatively correlated ($\beta = -0.783$, T-statistics = 20.370, p -value < 0.01). The results, as mentioned earlier, are in congruence with other researchers.

As defined by Cheah et al. (2023), “the effect size is calculated as the increase in R2 of the latent variable (LV) to which the path is connected, relative to the LV’s proportion of unexplained variance”. In addition, the effect size was calculated based on the exogenous variables omitted from the analysis to determine the impact on latent endogenous variables (Hair et al., 2013). to measure the effect size of a specific model. As Cohen (1988) proposed, the threshold values for small, medium, and substantial effects are 0.02, 0.15, and 0.35, respectively. The current study shows that the relationship between workplace bullying to stress ($f^2 = 0.291$) and stress to well-being ($f^2 = 0.555$) is considered medium and large. Statistically, there is no effect size of workplace bullying on well-being.

5.2.2. Testing mediating effect

PLS-SEM has recently become more often used in social science research to conduct indirect impact or mediation analysis. To understand the importance of mediating effects, the researcher needs to assume a sequence of relationships where an antecedent variable affects a mediating variable that affects the dependent variable (Nitzl et al., 2016).

Previously, to analyze the mediating effect, Baron and Kenny (1986) presented the methodology most frequently used in social science research. This technique was referred to as the Sobel Test. There is an assumption that the sampling distribution of the indirect effect should be normal to apply the Sobel test, which was considered a major flaw in the Sobel test (Hayes, 2009). This new approach, dubbed “bootstrapping,” is currently used to implement the indirect effect (mediation) (Preacher & Hayes, 2008). The t-values for indirect effects were determined using the bootstrapping technique (500 sub-samples). Researchers have shown that bootstrapping, a “non-parametric resampling approach,” is effective enough to detect the desired impact (Preacher & Hayes, 2008). Table 6 displays the findings from testing hypotheses on indirect relationships. It is found that stress mediates the relationship between WPB and WB ($\beta = -0.201$, T-statistics = 3.819, p -value < 0.01).

6. Conclusion

To break down the overall objective of this study, based on JD-R theory, we propose that the study aims to analyze how psychosocial job demand factors (psychological stress at work) influence the

psychological health factors (stress levels), as well as the well-being, of employees working in the banking sector in the context of their psychological health. This is be done by examining how these factors influence the employees’ psychological health. The workplace environment in which workers are required to work has further eroded psychosocial health, which results in further erosion of physical and mental capacities and contributes to the depletion of energy among workers (Brunetto et al., 2022). Despite the psychosocial job demands, the workplace environment in which workers are required to work has further eroded psychosocial health (Idris et al., 2012). According to our research findings, bullying of any kind—psychosocial, emotional, or in the workplace—has a major impact on the health and well-being of workers in the banking industry. It is accomplished by completely mediating the employees’ levels of occupational stress. According to the findings, psychosocial job demands can accurately predict both direct and indirect effects of psychological health (stress) on bank personnel (workplace bullying) (Mensah, 2021). According to the literature, the findings of a study that was carried out by Quine (2003) in the United Kingdom determined that bullying in the workplace is a serious problem that can have bad impacts on employees. In light of this, recent research has shed light on how important it is to investigate bullying. Researchers Balducci et al. (2012) and Islamoska et al. (2018) demonstrated that bullying cultures and insecure work settings promote fear of reporting concerns, which in turn can affect mental health. The Job Demands-Resources (JD-R) theory serves as a theoretical foundation to explain how workplace bullying influences employee well-being. This theoretical model defines workplace bullying as an important work requirement that causes psychological stress in employees resulting in both stress and weakened well-being (Bakker et al., 2014). Job resources consisting of supportive colleagues and autonomy act as buffers which reduce the negative impact of workplace bullying. This study supported that decreasing job demands including workplace bullying and enhancing job resources simultaneously reduces negative effects on employee health and productivity (Hauge et al., 2010).

According to the findings of this study, the most common form of inappropriate behavior that workers encounter while employed in the banking industry of Malaysia is bullying. Bullying at work significantly impacts employees’ mental health, and those who are bullied at work experience unfavorable impacts (Hurley et al., 2016; Rasool et al., 2021). People who are bullied frequently struggle with psychological stress as well as discontent with their current employment situation. The Job Demands-Resources (JD-R) theory provides an effective framework to understand the significant findings regarding the relationship between stress and well-being in your study. Job demands which involve heavy workloads and time constraints consume mental energy until they surpass personal adaptation thresholds leading to health problems through the health impairment process (Demerouti et al., 2001). Employees receive enhanced well-being through the motivational process because job resources such as autonomy and social support minimize negative stress effects by delivering necessary support and facilitating personal development (Bakker & Demerouti, 2007). The results showing stress negatively affecting well-being validate the JD-R theory’s health impairment process because they demonstrate why job demand management along with resource enhancement both prove essential to employee well-being.

In the course of the research, a highly substantial connection between bullying in the workplace and psychological stress was discovered. There was a correlation between increased vulnerability to bullying in the workplace and stress, which was strengthened by increased stress in the employee, which was connected to their level of well-being. Since the direct relationship between the two is minor and the indirect influence of stress will become large, there is a full mediating effect between workplace bullying and well-being (Annor & Amponsah-Tawiah, 2020). This is because the direct relationship between the two is insignificant. Studies on bullying in the workplace have received very little attention in the banking sector of Malaysia. Because

Table 6

Results of the mediating effect.

	Hypo	Beta	T-value	p-value	Remarks
H4	Workplace bullying - > Stress - > Well-being	-0.201	3.819	0.000*	Supported

* Level of Significance 0.001.

bullying is a significant issue in several nations, we believe our findings may contribute to the body of literature, including regional empirical evidence on workplace bullying. Employees in Malaysia banks who had to deal with bullying on the job reported having more severe mental health problems than their counterparts who did not face such problems. Particularly bullying at the workplace can lead to psychological stress, which can put an employee's psychological resources at risk and, as a result, impact their capacity to work and overall well-being. However, according to the employees who participated in the study, stress harmed their well-being due to the bullying (Islam et al., 2022).

As the pandemic continues, policymakers and business leaders must extend their commitment to guarantee that worker well-being can be improved and maintained. This can be accomplished by considering the factors that will continue to provide worker and business well-being for years. Specific policies and practices have been developed to assist workers in recovering from pandemics and post-pandemic conditions thanks to work done by the International Labor Organization and its partnership with the Organizations for Economic Co-operation and Development, as well as other professional labor groups. These policies and practices were developed to assist workers in post-pandemic conditions. These policy recommendations were prepared due to the COVID-19 process to aid governments and businesses in navigating through these changes in a way that is advantageous to both firms and workers simultaneously.

According to a worldwide survey, 30–40 % of employees suffer mental health problems (Qi et al., 2022). This figure is likely to change during the COVID-19 outbreak because of the increased susceptibility that adults were exposed to during the epidemic. When a person's mental health is poor, they are more likely to have undesirable effects such as suicidal impulses, behavioral abnormalities, and emotional disorders (Jamison, 2019). Therefore, study into this field is necessary if we will get rid of or significantly cut back on the harmful impacts. COVID-19 has made matters significantly worse for young people's mental health during an already unstable scenario (Basyouni & El Keshky, 2021). Because a pandemic on the scale of COVID-19 is getting closer, it is now more important than ever to carry out high-quality research in the mental health field. We developed our study question and framework, including coping methods and how they connect to post-traumatic stress disorder while keeping these facts in mind.

7. Study implications

7.1. Theoretical implications

This study enhances the Job Demands-Resources (JDR) theory as a broadly accepted framework to study job features and their influence on employee welfare and work results (Demerouti et al., 2001). The study findings support all major principles of the JDR model. The study establishes that workplace bullying produces substantial stress increases which validates the theory's concept that excessive job requirements negatively impact employees (Bakker & Demerouti, 2007). Job-induced stress proves to adversely affect employee well-being thus validating the JDR theory's claim about the relationship between demanding work and potential burnout situations (Bauer et al., 2014). Research findings demonstrate stress serves as a mediating variable that explains how workplace bullying affects employee well-being. Job resources such as social support and autonomy within the JDR framework act as protective elements against negative job demands (Bakker et al., 2005). Workplace bullying stress increases when employees lack enough resources for managing the situation which leads to a decrease in their overall well-being.

This study makes substantial contributions to existing research about workplace bullying while providing new information about the relationships among these phenomena. The research established that workplace bullying demonstrates a substantial positive relationship with work-related stress. Research has repeatedly established that

workplace bullying shows a moderate positive relationship with job stress according to previous studies (Firdaus et al., 2025; Chaudhary & Islam, 2023; Hogh et al., 2012). The research found no evidence supporting a negative connection between workplace bullying and well-being (Sprigg et al., 2019). Many studies have noted adverse impacts of workplace bullying yet this research shows no connection between bullying at work and employee well-being. The research demonstrates that workplace bullying results in increased psychological distress together with reduced life satisfaction (Nielsen & Einarsen, 2012). Research results validated previous studies which showed job stress leads directly to diminished well-being by discovering a powerful negative connection between workplace stress and overall well-being (Demerouti & Bakker, 2023). Studies show that high stress creates multiple unfavorable consequences which range from depression to anxiety and poor life satisfaction (Nielsen & Einarsen, 2012). The research demonstrates that stress functions as a key factor which explains how workplace bullying affects well-being. Workplace bullying acts as a stress generator that produces negative impacts on employee well-being. The study confirms previous research which demonstrates how psychological stress reactions act as a pathway to connect workplace bullying with negative health effects. Workplace bullying-induced anxiety proves to be an important factor that negatively influences job performance according to Rodríguez-Muñoz et al. (2009).

7.2. Practical implication

This research investigates significant employee well-being issues which affect Malaysia's banking sector. The banking sector stands as a fundamental economic foundation which drives both national developments along with employment creation. The ongoing economic instability combined with increasing employment rates in Malaysia makes it essential for the sector to maintain a healthy workforce that produces results. Management must adopt strategies to minimize the work-related stressors including role conflict and work overload because these stressors develop when employees expand their duties while extending their working hours due to internalized organizational commitment beliefs.

The COVID-19 pandemic made workplace mental stress worse especially for bankers and other service sector employees thus requiring immediate focused intervention. The research concludes that work environments require psychosocial job resources such as organizational justice and efficient conflict resolution tools to create total well-being. The research data serves as a basis to create practical employee welfare protection strategies during and beyond public health emergencies. Psychosocial support structures require strategic funding during emergencies because they provide vital assistance to both employees and policymakers who face elevated demands and threats.

8. Limitation

Although this study has several drawbacks, its advantages outweigh its disadvantages. First, all of the data were obtained from the participants' self-reports, leading to increased associations between variables due to the sharing of method variance. This was one of the main contributors to the increase in the associations between variables. Second, a cross-sectional approach was taken in the design of this research project. As a result, one cannot deduce that there is a causal connection between the two events. Using a longitudinal design in further research could be beneficial in providing more convincing evidence of the directionality of the connections suggested in our model. In addition to using survey questionnaires for data collection, the third step in the data collection process would be to incorporate interview methods to gain a deeper comprehension of the connection between the well-being of employees, levels of stress in the workplace, and instances of bullying in the workplace. In the current research, we have investigated some elements influencing job demand and work resources. In future research, it will be

important to investigate not just other aspects but also potential moderating effects within the context of the existing model and consider other factors.

CRedit authorship contribution statement

Muhammad Zulqarnain Arshad: Writing – original draft, Supervision, Conceptualization. **Yunxiao Zhang:** Writing – review & editing, Resources, Investigation. **Muhammad Ali Arshad:** Visualization, Software, Methodology, Formal analysis. **Pittayatorn Kaewkong:** Writing – review & editing, Validation, Supervision, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this manuscript.

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Data availability

The data will be made available on request from the corresponding author.

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