



RESEARCH ARTICLE

# Managing Occupational Stress and Burnout in Achieving Employee Wellbeing as Prerequisite for Sustainable Development of Organization

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## ABSTRACT

This research seeks to explore the relationship between occupational stress, burnout syndrome, and employee wellbeing among medical professionals in Saudi Arabia. It aims to elucidate the impact of stress and burnout while examining the moderating role of wellbeing. Additionally, the study aims to identify predictors of burnout and stress factors to promote employee wellbeing in alignment with Sustainable Development Goals (SDGs) of organization. A sample of 300 medical professionals selected using convenient random sampling, ensuring diversity in age, social status, income, and education levels. Standardized instruments, including the Occupational Stress Index, Maslach Burnout Inventory, and Employee Wellbeing Survey Questionnaire were employed to collect data. Multiple regression analysis and structural equation modelling are used for data analysis, facilitated by SPSS and AMOS software. The findings indicated a direct and significant impact of occupational stress on burnout syndrome among medical professionals. Furthermore, emotional wellbeing is observed to moderate the relationship between stress and burnout, highlighting its importance in mitigating adverse effects. This study underscores the critical role of managing occupational stress and burnout in enhancing employee wellbeing and fostering sustainable organizational development. By identifying predictors of burnout and stress factors, organizations can implement targeted interventions to promote employee wellbeing and achieve long term sustainability.

## INTRODUCTION

Nowadays, expectations of employees are more than ever, as they are expected to do more intense work, be more successful, and deliver more, which can affect their quality of life. Occupational stress is a negative physical and emotional response when the requirements of the job do not meet the responsibilities, resources, and the work demands (Niosh, 2008). Stress is a reaction to stimuli and can have either a positive or negative response (Ismail et al., 2010; Shinde & Patel, 2014). Beehr and Newman (1978) viewed occupational stress as “a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning”. Occupational stress may be caused by various factors that can harm the emotional and physical well-being by influencing their efficiency and impact negatively on their performance (Koinis et al., 2015). Though some can withstand the stress, other professions are inherently more stressful, specifically professions that require rapid decision-making skills and serious consequences (Almutairi et al., 2024). A multi-country study concluded that factors such as time pressure, poor working conditions, deadlines, heavy workload, prolonged working hours, and

different beliefs are among the top workplace stress factors (Raišiene et al., 2023). The sources of stress can actively accumulate leading to behavioral, psychological, and biological reactions Allam (2017) & Knezevic. et al., (2023).

Burnout syndrome (BOS) has been defined as the experience of long-term exhaustion and diminished interest, usually in the work context. It comes across as the result of a period of expending too much effort at work while having too little recovery (Wai et al., 2024). BOS may affect workers of any kind; however, high stress jobs can lead to more BOS than lower stress jobs. Healthcare workers (HCWs) are often prone to BOS, however, wide variations in the prevalence of BOS have been reported; higher levels were reported among HCWs working in emergency department (ED) and intensive care units (ICUs) as they are exposed to a high level of job stress; a factor known to increase the risk of BOS, which could be attributed to critical patient care, high mortality rates, improper working circumstances, and shortage of time to meet patients' needs, therefore, they experience stress levels beyond their coping capacities that may result in burnout (Haque et al., 2024). BOS has been associated with decreased quality of care, and high rate of absenteeism and turnover among HCWs, all of which have consequences in the healthcare sector. Maslach Burnout Inventory (MBI) has been the gold standard for the diagnosis of BOS in clinical settings. MBI measures three dimensions of BOS; emotional exhaustion, depersonalization (negative or cynical attitudes toward patients), and reduced sense of personal accomplishment. Emotional exhaustion has been identified as the hallmark of burnout. People who experience all three symptoms have the greatest degree of BOS (Allam et al., 2023).

Mental health and well-being are as important as physical health, and one of the main reasons is that it has an impact on people's work life. This is matching with WHO definition of health: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Howard & Houry, 2024).

National public health objectives as described in Healthy People 2030 include identifying and developing strategies to promote robustness and well-being (Koh et al., 2021). Voluminous research speaks to the importance of mental health for overall well-being; it is not only desirable in its own right but may causally contribute to healthy aging and longevity (Cross et al., 2018; Kushlev et al., 2020; Ngamaba et al., 2017). Moreover, evidence strongly suggests that factors reflecting healthy psychological functioning like having high levels of life satisfaction or sense of purpose predict physical health independent of mental health problems such as depression (Chida & Steptoe, 2008; Pressman et al., 2019; Zaninotto & Steptoe, 2019).

Multiple disciplines have recognized that studying states of positive well-being can also provide important insights, not only into how to reduce suffering but also how to improve population health and even civil society (Wickneswary et al., 2024; Frijters et al., 2020). Numerous strategies for improving psychological health beyond reducing suffering have been identified, but less clear is whether such interventions have effects of sufficient magnitude to drive changes that impact subsequent physical health and are scalable for implementing at the population level.

## LITERATURE REVIEW

### Occupational stress

Compared with other occupations, healthcare workers are susceptible to significant psychological stress (Izdebski et al., 2023). Healthcare providers are more likely to experience stress due to their work conditions with more intense and stressful situations in caring for those in need (Norful et al., 2021). Some of the situations include human suffering and death, fears for personal safety, high workload (particularly for those treating infected patients) and limited support may contribute to fatigue, burnout, and stress (Liu et al., 2020; Ifedi et al., 2024). A study conducted in Riyadh with healthcare workers showed that 15.8% suffered from high-stress levels and 77.2% from moderate stress levels (Alwaqdani et al., 2021). A substantial positive relationship between job stress, intrinsic impoverishment, role overload, and unreasonable pressure and performance, with intrinsic impoverishment and role overload serving as predictors of performance (Ali and Miralam, 2019).

The history of humanity has been marked by the impact of many fearsome pandemics of infectious diseases such as SARS, MERS, and COVID-19, resulting in more stress in the HCW (Shah et al., 2022). Additionally, studies from previous epidemics indicated that the sudden onset of an unknown disease

with a high mortality rate affect the mental health of HCWs (Stuijzand et al., 2020). HCW may also experience psychological effects because of the working environment (Dai et al., 2020). This includes lacking personal protective equipment, reorganizing units and services with the addition of new teams, fear of contracting an infection or spreading it to loved ones or patients and having to make morally challenging decisions, feeling helpless, longer working hours and others (Allam, 2017; Sun et al., 2021; Thomaier et al., 2020; Khusid et al., 2020; Shaukat et al., 2020; Mokhtari et al., 2020).

The effects of depression on doctors' health and wellbeing may extend to how it affects their patients. Physicians who are depressed struggle to complete professional and personal obligations take more sick days and are more likely to exhibit subpar performance at work (Abu Bakar et al., 2023). According to a study of pediatric residents, depressive people are six times more likely to make prescription mistakes than those who are not depressed, which poses a risk to patient safety (Mainwaring, 2022).

### **Burnout Syndrome**

Burnout syndrome has been defined as a chronic response to stress in the workplace (Sasaki et al., 2009) characterized by a physical, mental and emotional state of exhaustion (Afana et al., 1995) that reduces the sense of personal and professional fulfilment (Ding et al., 2015). Risk factors could be conflicts and financial problems at work, work overload, communication or organization problems (Pereira et al., 2012). Some professions are more susceptible than others, and in particular, we focused on studies about healthcare workers that are in daily contact with the seriously ill, such as doctors, nurses and social workers (Razu et al., 2021). Howlett et al., 2015 highlighted high levels of burnout among the emergency department staff (32.1% suffered from emotional exhaustion), in particular among doctors (46%) which had a high-medium score in burnout scales, and nurses that reported unpleasant contacts with supervisors (they had a high score in burnout scales). Concerns relating to burnout, especially in recent years, have developed a growing interest among mental health scholars. In fact, an important study was recently conducted in Italy that aimed to examine personal resources and psychological symptoms associated with burnout in 933 healthcare workers during the COVID-19 epidemic period. Sociodemographic and occupational data were investigated; depression, anxiety, burnout, and posttraumatic symptoms, as well as psychological well-being, were cross-sectionally assessed using a questionnaire. Results showed a particular incidence of depression (57.9%), anxiety (65.2%), post-traumatic symptoms (55%), and burnout (25.61%) (Conti et al., 2021). This syndrome is considered as a multidimensional problem because of a series of symptoms such as depersonalization, anxiety, lack of motivation, mental fatigue, lack of personal and professional achievement, that influence worker and patient's wellness, but it is important to highlight that each person could face problems in different ways.

### **Emotional Well-Being**

High-pressure work environment with lack of appropriate guidelines, increasing work demands, and higher efforts of (Healthcare Workers) HCWs, especially in hospitals, can lead to increased burnout, psychological symptoms, and secondary traumatic stress (STS) (Pothiawala, 2020). The emotional well-being of HCWs can significantly impact patient care. HCWs' poor quality of life can cause negative effects such as separation from patients, poor attitude to work, lack of concern, delay and/or absence (Smart et al., 2014).

Research to advance this understanding is constrained, at least in part, by lack of conceptual clarity or consensus on how to understand mental health across the spectrum from despair and depression to states of well-being and fully realized psychological health (Chowdhury et al., 2023). Research on and understanding of states of poor mental health are well-developed, yet scholarship capturing healthy functioning and positive well-being is still wrestling with identifying clear conceptual definitions, valid measures, and appropriate causal models (Osman et al., 2024). Numerous terms serve as referents to this form of health (e.g., psychological well-being, mental well-being, subjective wellbeing), and within them, scholars have distinguished specific aspects of well-being such as positive affect, life satisfaction, and sense of purpose (Jing et al., 2023). Definitions of and metrics for measuring psychological aspects of well-being have proliferated over recent decades, and numerous articles and monographs have reviewed these terms and provided guidance on their measurement (e.g., National Research Council, 2014; OECD, 2013). Despite these comprehensive resources, researchers and practitioners continue to express uncertainty regarding selecting measures to use

or psychological aspects of well-being to target in their research, interventions, or policy work (VanderWeele et al., 2020).

In 2018, Feller and colleagues proposed a national public health initiative focusing on emotional wellbeing (EWB). They defined EWB as "...an umbrella term for psychological concepts such as life satisfaction, life purpose, and positive emotions..." Recognizing that many related terms are already in use, they suggested realizing this initiative would require developing a more unified definition of key concepts and approach to measurement (Feller et al., 2018).

### **Occupational Stress, Burnout Syndrome and Emotional Wellbeing**

Occupational stress, burnout syndrome, and emotional wellbeing are critical aspects affecting the healthcare workforce in the Kingdom of Saudi Arabia (KSA) (Alqarni et al., 2022). Healthcare professionals in KSA often face unique challenges due to high patient volumes, long working hours, and societal expectations (Alluhidan et al., 2020). Occupational stress, stemming from these factors, can lead to physical, emotional, and psychological strain among healthcare workers (Sirois & Owens, 2021). Burnout syndrome, a severe consequence of prolonged stress, manifests as emotional exhaustion, depersonalization, and reduced personal accomplishment (Marquez, 2022). In the healthcare context, burnout can result in decreased job satisfaction, compromised patient care, and increased turnover rates (Stemmer et al., 2022). The impact of these phenomena on the emotional wellbeing of healthcare workers cannot be understated (Ramalingam et al., 2024). Constant exposure to suffering, trauma, and high-pressure situations can erode resilience and contribute to emotional distress (Louis et al., 2024). Moreover, the stigma surrounding mental health in KSA may deter healthcare professionals from seeking support, exacerbating their struggles (Noorwali et al., 2022).

### **Research Gap**

Recent years have witnessed a keen interest in researching the stress experienced by healthcare workers. The goal of this study has been to identifying the causes of stress as well as the effects it has on patient care, organizational effectiveness, and individual well-being (Maresca et al., 2022) expressed different feeling in extremely demanding work situation (Rucker et al., 2021), the quality of the life of healthcare workers is affected by relational asymmetry (Berger et al., 2020) that animates the doctor and ignites the risk of stress and related pathologies, such as burnout (Gerskowitch & Tribe, 2021). Despite the plenty of studies conducted globally to investigate occupational stress and Burnout Syndrome, only few studies have been carried out in the Middle East (Fei et al., 2024). Moreover, it needs to study stress and Burnout Syndrome in the Middle-Eastern region in health sector employees. Therefore, this research aimed at studying the relationship between BOS and job stress among nurses and healthcare employees. Also, this study aims to find the role of emotional well-being in the relationship between occupational stress and burnout syndrome. To our knowledge, limited literature is available related to the prevalence of occupational stress, burnout syndrome, emotional well-being, and the associating factors in Healthcare Workers in KSA. The findings of this study are likely to reinforce the necessity for mental health programs tailored to Healthcare Workers. Such initiatives will be especially beneficial in preventing and fighting work stress, which will result in better healthcare.

### **Objectives of the Study:**

- To measure the impact of occupational stress on burnout syndrome of female healthcare workers in KSA.
- To investigate the role of emotional wellbeing as a potential mediator or moderator in the relationship between occupational stress and burnout syndrome.

**Hypothesis:** In the light of reviewed literature following hypotheses were formulated to verify the stated objectives.

*H1: Occupational stress has a direct and significant impact on burnout syndrome of female healthcare workers in KSA.*

*H2: Emotional wellbeing plays a moderating role on the relationship between occupational stress and burnout syndrome.*

H3: Emotional wellbeing plays a mediating role in the relationship between occupational stress and burnout syndrome.

**RESEARCH METHOD:**

**Sample:** Samples of 278 female healthcare workers were selected through convenient random sampling technique, taking care of their age, work experience, income and nationality. The purpose of this study was sufficiently explained to each individual (Senathirajah et al., 2023).

**Tools Used:** 1). A 36-item, 12-dimension Occupational Stress Questionnaire developed and standardized by Pasupulati (2021) was used to measure the stress. Dimension of occupational stress are as role overload (RO), role ambiguity (RA), role conflict (RC), unreasonable group and political pressure (UGPP), responsibility for persons (RP), under participation (UP), powerlessness (PL), peer group relations (PGR), intrinsic impoverishment (II), low status (LS), strenuous working conditions (SWC), unprofitability (UNP), 2). Maslach et al., (2017)&Khalil et al., (2023a) job burnout scale consists of 22 items with 3-dimensions such as emotional exhaustion, depersonalization and reduced personal accomplishment were used to measure the burnout syndrome. 3). Employee Well-being scale developed by Zheng et al., (2015) is a combination of 18- items with 3-dimension such as life wellbeing, work wellbeing and psychological wellbeing, used to assess the wellbeing of employee.

**Statistics for Data Analysis:** Based on design of research descriptive statistics such as mean, sd., correlation analysis, regression analysis and SEM (Mediation/Moderation analysis) using SPSS and AMOS were the most suitable quantitative techniques for data analysis (Senathirajah et al., 2024).

**Ethical consideration:** To maintain the ethics of research, respondents were assured that their responses would never be revealed before any higher authority. They also assured that this research is for academic purpose only.

**Results and Discussions**

To analyze data SPSS and AMOS were found the most suitable quantitative techniques (Francis et al., 2023). The results presented in tables followed by interpretations.

**Table 1: Descriptive statistics showing Mean, Sd. and Correlation of variables studied among female healthcare workers (N=278).**

| Variables Studied | Mean  | Sd.   | RO      | RA      | RC      | UGPP    | RP     | UP      | PL      | PGR    | II     | LS     | SWC     | UNP     | EE      | DP     | RPA    | LWB    | WWB    | PWB |  |
|-------------------|-------|-------|---------|---------|---------|---------|--------|---------|---------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|-----|--|
| RO                | 19.20 | 7.36  | -       |         |         |         |        |         |         |        |        |        |         |         |         |        |        |        |        |     |  |
| RA                | 13.06 | 5.01  | .851**  | -       |         |         |        |         |         |        |        |        |         |         |         |        |        |        |        |     |  |
| RC                | 16.51 | 6.35  | .848**  | .861**  | -       |         |        |         |         |        |        |        |         |         |         |        |        |        |        |     |  |
| UGPP              | 13.28 | 6.35  | .850**  | .800**  | .849**  | -       |        |         |         |        |        |        |         |         |         |        |        |        |        |     |  |
| RP                | 9.81  | 3.73  | .825**  | .850**  | .841**  | .810**  | -      |         |         |        |        |        |         |         |         |        |        |        |        |     |  |
| UP                | 13.27 | 5.04  | .845**  | .856**  | .849**  | .851**  | .848** | -       |         |        |        |        |         |         |         |        |        |        |        |     |  |
| PL                | 9.93  | 3.80  | .822**  | .818**  | .851**  | .810**  | .806** | .814**  | -       |        |        |        |         |         |         |        |        |        |        |     |  |
| PGR               | 12.66 | 5.21  | .594**  | .620**  | .669**  | .691**  | .623** | .678**  | .634**  | -      |        |        |         |         |         |        |        |        |        |     |  |
| II                | 9.48  | 3.81  | .449**  | .499**  | .535**  | .555**  | .498** | .563**  | .507**  | .829** | -      |        |         |         |         |        |        |        |        |     |  |
| LS                | 9.51  | 3.96  | .442**  | .498**  | .519**  | .556**  | .516** | .559**  | .490**  | .839** | .837** | -      |         |         |         |        |        |        |        |     |  |
| SWC               | 12.56 | 5.24  | .415**  | .468**  | .506**  | .537**  | .482** | .543**  | .484**  | .845** | .850** | .858** | -       |         |         |        |        |        |        |     |  |
| UNP               | 6.17  | 2.62  | .480**  | .566**  | .558**  | .556**  | .498** | .576**  | .521**  | .762** | .715** | .700** | .742**  | -       |         |        |        |        |        |     |  |
| EE                | 24.39 | 10.33 | .415**  | .415**  | .432**  | .473**  | .443** | .458**  | .456**  | .586** | .584** | .521** | .540**  | .488**  | -       |        |        |        |        |     |  |
| DP                | 22.47 | 9.00  | .500**  | .536**  | .525**  | .559**  | .551** | .567**  | .569**  | .681** | .613** | .588** | .592**  | .588**  | .752**  | -      |        |        |        |     |  |
| RPA               | 23.45 | 8.74  | .550**  | .573**  | .567**  | .576**  | .567** | .604**  | .580**  | .608** | .559** | .522** | .504**  | .556**  | .493**  | .729** | -      |        |        |     |  |
| LWB               | 18.01 | 7.93  | -.496** | -.587** | -.533** | -.487** | .451** | .583**  | -.485** | .465** | .607** | -.024  | .422**  | .179*   | .356**  | .205*  | .480** | -      |        |     |  |
| WWB               | 18.86 | 7.89  | .343**  | .244**  | .253**  | -.167*  | -.205* | -.213** | .023    | -.129  | -.024  | .209*  | -.485** | .561**  | .023    | .720** | .480** | .678** | -      |     |  |
| PWB               | 17.94 | 7.68  | .136    | .190*   | .114    | .023    | .003   | .195*   | .356**  | .076   | .487** | .204*  | .624**  | -.753** | -.587** | .949** | .244** | .683** | .583** | -   |  |

\*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).

Table-1 displays descriptive statistics Means, Sds. and Pearson correlation coefficients between different dimensions of occupational stress and burnout syndromes and wellbeing. Each correlation coefficient measures the strength and direction of the relationship between two variables.

Overall, there are significant positive correlations between most of the variables, indicating that as one dimension is increasing; the other tends to increase as well (Khalil et al., 2023b). For example: Role overload (RO) is strongly correlated with role ambiguity (RA), role conflict (RC), unreasonable

group and political pressure (UGPP), and other stress dimensions (Ahmed et al. 2022a). Peer group relations (PGR) have positive correlations with most stress dimensions, indicating that poor peer relations tend to accompany higher stress levels. Burnout syndrome components (emotional exhaustion, depersonalization, reduced personal accomplishment) are positively correlated with each other, indicating they often co-occur.

These correlations provide insights into the interconnectedness of different stressors and wellbeing factors in the workplace, highlighting areas where interventions or improvements may be needed to promote employee health and productivity to maintain sustainable organizational development.”

**Table 2: Model summary of Regression analysis on Burnout Syndrome among female healthcare workers (N=278)**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .734 <sup>a</sup> | .539     | .537              | .56769                     |

a. Predictors: (Constant), OS

The model summary (Table 2) indicates that the linear regression model has an R-square value of 0.539, meaning that approximately 53.9% of the variability in the dependent variable burnout syndrome (BS) can be explained by the independent variable organizational stress (OS) in the model. The adjusted R-square, which accounts for the number of predictors in the model, is 0.537. The standard error of the estimate is 0.56769, representing the average distance between the observed values and the predicted values by the model. Occupational stress appeared as the predictor of burnout syndrome. According to Allam; Malik, &George, (2021), this study is in line with their findings.

**Table 3: Showing ANOVA on Burnout Syndrome as a function of OS among female healthcare workers.**

| Model |            | Sum of Squares | df  | Mean Square | F       | Sig.              |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1     | Regression | 104.033        | 1   | 104.033     | 322.808 | .000 <sup>b</sup> |
|       | Residual   | 88.948         | 276 | .322        |         |                   |
|       | Total      | 192.981        | 277 |             |         |                   |

a. Dependent Variable: BS

b. Predictors: (Constant), OS

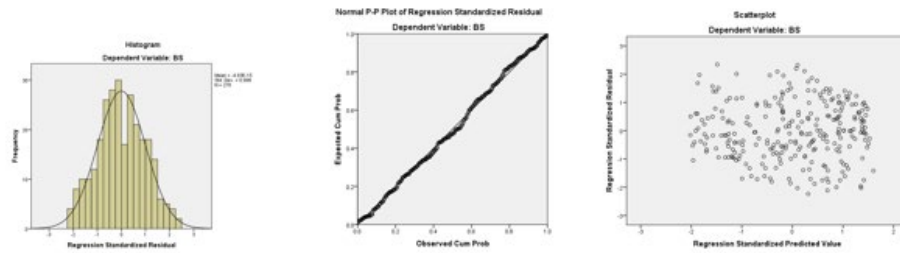
Table 3 presents the results of the analysis of variance (ANOVA) for the regression model. The model has one degree of freedom for the regression and 276 degrees of freedom for the error. The total degrees of freedom are 277. The ANOVA test assesses the overall significance of the regression model in predicting the dependent variable (BS) based on the independent variable (OS).

**Table 4: Coefficient of Regression on Burnout Syndrome among female healthcare workers.**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
|       |            | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant) | .957                        | .130       |                           | 7.386  | .000 |
|       | OS         | .697                        | .039       | .734                      | 17.967 | .000 |

a. Dependent Variable: BS

In Table 4, the coefficients for the regression model are presented. The constant term (Constant) has a coefficient of 0.957 with a standard error of 0.130. The independent variable, Occupational Stress (OS), has a coefficient of 0.697 with a standard error of 0.039 and a standardized coefficient (Beta) of 0.734. The t-value associated with OS is 17.967, and the corresponding p-value is < 0.001, indicating that OS significantly predicts the dependent variable (BS).



**Figure 1. Charts of the Study**

The histogram provides a visual representation of the distribution of the standardized residuals from the regression model. The standardized residuals are normally distributed, the histogram resembles a bell-shaped curve (Lee et al., 2023). Occupational stress significantly predicts burnout syndrome, and a roughly symmetric distribution of residuals around zero, indicating that the model's predictions are unbiased (Ahmed et al., 2024). The normal probability plot (P-P plot) compares the standardized residuals to a theoretical normal distribution (Ying et al., 2023). The points on the plot closely follow a diagonal line, it suggests that the residuals are normally distributed. A clear linear pattern in the P-P plot suggests that the residuals are approximately normally distributed, supporting the validity of the regression model. The scatter plot can be used to visualize the relationship between the predicted values of burnout syndrome (based on the regression model) and the standardized residuals. There is a significant impact of occupational stress on burnout syndrome, and a clear pattern in the scatter plot is visualized.

**Objective 2 - To investigate role of emotional wellbeing as a potential mediator or moderator in the relationship between occupational stress on burnout syndrome.**

*H2: Emotional wellbeing plays a moderating role on the relationship between occupational stress and burnout syndrome.*

*H3: Emotional wellbeing plays a mediating role in the relationship between occupational stress and burnout syndrome.*

*Moderation Analysis Using SPSS*

**Table 5: Model summary of Regression analysis of Employee Wellbeing as Mediator of OS and Burnout Syndrome among female healthcare workers (N=278).**

| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|--|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|  |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1  | .804 <sup>a</sup> | .766     | .733              | .59718854                  | .646              | 250.853  | 2   | 275 | .000          |
| 2  | .853 <sup>b</sup> | .836     | .822              | .59827708                  | .070              | 117.45   | 1   | 274 | .000          |
| a. Predictors: (Constant), Zscore(EW), Zscore(OS)          |                   |          |                   |                            |                   |          |     |     |               |
| b. Predictors: (Constant), Zscore(EW), Zscore(OS), INTTERM |                   |          |                   |                            |                   |          |     |     |               |

The “provided moderation analysis (Table 5) evaluates emotional wellbeing (EW) as a potential moderator in the relationship between occupational stress (OS) and burnout syndrome (BS). In Model 1, including Zscore(EW) and Zscore(OS) as predictors, the R Square and Adjusted R Square are 0.766 and 0.733, respectively. The addition of predictors significantly increases R Square by 0.646, as evidenced by a significant F Change statistic (F = 250.853, p < .001). Model 2 extends Model 1 by adding an interaction term (INTTERM) between Zscore(EW) and Zscore(OS). This results in a higher R Square (0.836) and Adjusted R Square (0.822). The interaction term contributes significantly to the model's improvement (R Square Change = 0.070, F Change = 117.45, p < .001), suggesting that EW moderates the relationship between OS and BS. Overall, these findings support the role of employee wellbeing as a moderator in the OS-BS relationship.

**Table 6: Showing ANOVA on Burnout Syndrome as Mediating effect of EW and OS among female healthcare workers.**

| Model  |            | Sum of Squares | df  | Mean Square | F       | Sig.              |
|--|------------|----------------|-----|-------------|---------|-------------------|
| 1  | Regression | 178.926        | 2   | 89.463      | 250.853 | .000 <sup>b</sup> |
|  | Residual   | 98.074         | 275 | .357        |         |                   |
|  | Total      | 277.000        | 277 |             |         |                   |
| 2  | Regression | 178.926        | 3   | 59.642      | 166.628 | .000 <sup>c</sup> |
|  | Residual   | 98.074         | 274 | .358        |         |                   |
|  | Total      | 277.000        | 277 |             |         |                   |
| a. Dependent Variable: Zscore(BS)                          |            |                |     |             |         |                   |
| b. Predictors: (Constant), Zscore(EW), Zscore(OS)          |            |                |     |             |         |                   |
| c. Predictors: (Constant), Zscore(EW), Zscore(OS), INTTERM |            |                |     |             |         |                   |

Table 6 presents the results of the ANOVA for the moderation analysis investigating emotional wellbeing (EW) as a potential moderator of the relationship between occupational stress (OS) and burnout syndrome (BS). In Model 1, which includes Zscore(EW) and Zscore(OS) as predictors, the regression is significant ( $F = 250.853$ ,  $p < .001$ ), indicating that the model explains a significant amount of variance in Zscore(BS). The predictors collectively contribute to explaining the variance in Zscore(BS), as evidenced by the significant F statistic. Model 2 extends Model 1 by adding an interaction term (INTTERM) between Zscore(EW) and Zscore(OS). The regression remains significant ( $F = 166.628$ ,  $p < .001$ ), suggesting that the addition of the interaction term further enhances the model's ability to explain variance in Zscore(BS). These results provide support for emotional well-being as a potential moderator in the relationship between occupational stress and burnout syndrome (Khalil et al., 2022b).

**Table 7: Coefficient of Regression on Burnout Syndrome as Mediating effect of EW and OS among female healthcare workers.**

| Model                             |            | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  |
|-----------------------------------|------------|-----------------------------|------------|---------------------------|--------|-------|
|                                   |            | B                           | Std. Error | Beta                      |        |       |
| 1                                 | (Constant) | 27.155                      | 2.036      |                           | 10.090 | 1.000 |
|                                   | Zscore(OS) | .056                        | .052       | .391                      | 5.509  | .000  |
|                                   | Zscore(EW) | 24.412                      | 2.052      | .474                      | 9.110  | .000  |
| 2                                 | (Constant) | 34.629                      | 2.548      |                           | 13.014 | .000  |
|                                   | Zscore(OS) | .089                        | .036       | .189                      | 1.851  | .189  |
|                                   | Zscore(EW) | 11.472                      | .2181      | .472                      | 4.601  | .000  |
|                                   | INTTERM    | .090                        | .053       | .504                      | 4.014  | .000  |
| a. Dependent Variable: Zscore(BS) |            |                             |            |                           |        |       |

Table 7 presents the coefficients for a moderation analysis investigating emotional well-being (EW) as a potential moderator of the relationship between occupational stress (OS) and burnout syndrome (BS). In Model 1, both Zscore(OS) and Zscore(EW) have significant positive coefficients ( $p < .001$ ), indicating that higher levels of occupational stress and emotional wellbeing are associated with higher levels of burnout syndrome. These coefficients represent the direct effects of OS and EW on BS without considering their interaction. Model 2 introduces the interaction term (INTTERM) between Zscore(OS) and Zscore(EW). In addition to the main effects, the coefficient for INTTERM is also significant ( $p < .001$ ), indicating that the interaction between OS and EW significantly contributes to predicting BS beyond the main effects. The moderated multiple regression equation for Model 2 can be expressed as follows:

$$Zscore(BS) = 34.629 + 0.089(Zscore(OS)) + 11.472(Zscore(EW)) + 0.090(Zscore(OS) * Zscore(EW)).$$



This equation accounts for the direct effects of occupational stress and emotional well-being on burnout syndrome, as well as the moderating effect of their interaction.”

Moderation Analysis Using SEM

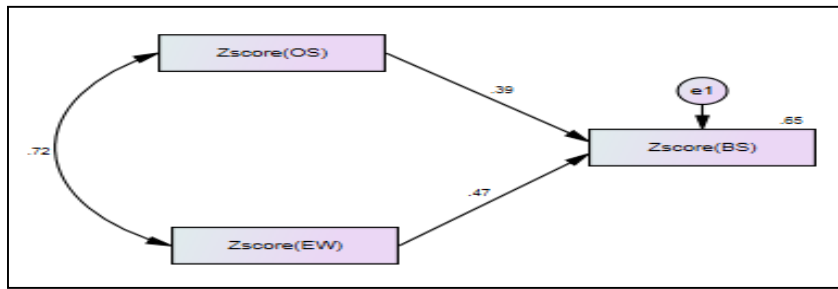


Figure 2. Moderation Analysis Model 1

Table 8. Regression Weights: (Group number 1 - Default model)

|     |      |     | Estimate | S.E. | C.R.  | P   | Label |
|-----|------|-----|----------|------|-------|-----|-------|
| ZBS | <--- | ZOS | .391     | .052 | 7.536 | *** |       |
| ZBS | <--- | ZEW | .474     | .052 | 9.143 | *** |       |

“The table 8 and figure 2 presents estimates, standard errors (S.E.), critical ratios (C.R.), and p-values for the regression coefficients in the moderation analysis examining emotional well-being (EW) as a potential moderator of the relationship between occupational stress (OS) and burnout syndrome (BS). Both Zscore(OS) and Zscore(EW) have significant positive coefficients ( $p < .001$ ), indicating that higher levels of occupational stress and emotional well-being are associated with higher levels of burnout syndrome (Ahmed et al., 2022b). These findings suggest that occupational stress and emotional well-being independently contribute to burnout syndrome. The significant coefficients for Zscore(OS) and Zscore(EW) suggest that both factors have direct effects on burnout syndrome. Additionally, the significant p-values indicate that these effects are unlikely due to chance (Barman et al., 2023).

Overall, these results support the hypothesis that emotional well-being moderates the relationship between occupational stress and burnout syndrome, implying that the impact of occupational stress on burnout syndrome may vary depending on individuals' levels of emotional well-being that accounted for sustainable development of organization (Hailong et al., 2022).

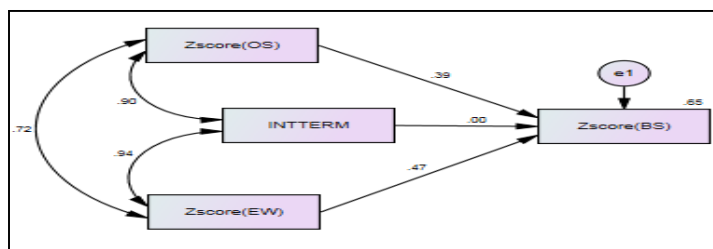


Figure 3. Moderation Analysis Model 2

Table 9. Regression Weights: (Group number 1 - Default model)

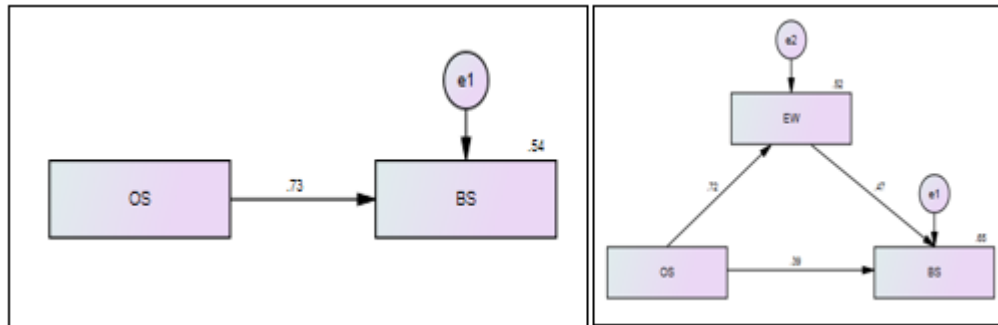
|     |      |         | Estimate | S.E. | C.R.  | P    | Label |
|-----|------|---------|----------|------|-------|------|-------|
| ZBS | <--- | ZOS     | .389     | .136 | 2.866 | .004 |       |
| ZBS | <--- | INTTERM | .001     | .053 | .014  | .002 |       |
| ZBS | <--- | ZEW     | .472     | .180 | 2.615 | ***  |       |

In the above figure 3 and regression weights table 9, the estimates, standard errors (S.E.), critical ratios (C.R.), and p-values are presented for the regression coefficients in the moderation analysis examining emotional well-being (EW) as a potential moderator of the relationship between occupational stress (OS) and burnout syndrome (BS) (Sirajuddin et al., 2023).The coefficient for Zscore(OS) is significant ( $p = .004$ ), indicating that occupational stress has a positive effect on

burnout syndrome. The coefficient for INTTERM, representing the interaction between occupational stress and emotional well-being, is also significant ( $p = .002$ ), suggesting that the interaction term significantly influences burnout syndrome. Furthermore, the coefficient for Zscore(EW) is significant ( $p < .001$ ), indicating that emotional well-being has a direct effect on burnout syndrome.

These results imply that both occupational stress and emotional well-being independently contribute to burnout syndrome. Additionally, the interaction between occupational stress and emotional well-being significantly influences burnout syndrome, suggesting that emotional well-being moderates the relationship between occupational stress and burnout syndrome.”

**Mediation Analysis Using SEM**



**Figure 4. Mediation Analysis Model**

**Table 10: Path coefficients and significances**

| Paths            | $\beta$ Value | T-value | P-value | BCI LL | BCIUL | $f^2$ |
|------------------|---------------|---------|---------|--------|-------|-------|
| OS --> BS        | 0.414         | 8.081   | 0.000   | 0.081  | 0.467 | 0.000 |
| OS --> EW        | 0.313         | 3.316   | 0.008   | 0.241  | 0.477 | 0.116 |
| OS --> EW --> BS | 0.065         | 4.751   | 0.231   | 0.013  | 0.083 | -     |

The provided path coefficients indicate the relationships between Occupational Stress (OS), Emotional Wellbeing (EW), and Burnout Syndrome (BS). OS -> BS: The path coefficient is 0.414, indicating a significant positive relationship between OS and BS ( $p < 0.001$ ). This suggests that higher levels of OS are associated with higher levels of BS. OS -> EW: The path coefficient is 0.313, indicating a significant positive relationship between OS and EW ( $p = 0.008$ ). This implies that higher levels of OS are associated with lower levels of EW. OS -> EW -> BS: The path coefficient is 0.065, but the p-value is 0.231, which is greater than the conventional significance level of 0.05. This indicates that the indirect effect of OS on BS through EW is not statistically significant. Therefore, in this model, EW does not mediate the relationship between OS and BS.

Overall, while OS has direct effects on both EW and BS, the indirect effect of OS on BS through EW is not supported by the data in this analysis.”

**CONCLUSION AND SUGGESTIONS:**

| Hypothesis | Statement   | Label    |
|------------|---|----------|
| H1         | Occupational stress has a direct and significant impact on burnout syndrome of female healthcare workers in KSA.  | Accepted |
| H2         | Emotional wellbeing plays a moderating role on the relationship between occupational stress and burnout syndrome. | Accepted |
| H3         | Emotional wellbeing plays a mediating role in the relationship between occupational stress and burnout syndrome.  | Rejected |

Descriptive statistics provided in Table 1 offer insights into the distribution of scores as central tendency, dispersion and correlation of various variables, including occupational stress dimensions, components of burnout syndrome and wellbeing indicators (Wan et al., 2023). The means reflect the average levels of agreement with each item, while the standard deviations indicate the variability within each variable and correlation revealed the association between factors. These statistics provide a comprehensive overview of the perceived levels of occupational stress and related dimensions among the participants. The Pearson correlation coefficients presented reveal significant

positive correlations between most variables, underscoring the interconnectedness of different stressors and wellbeing factors in the workplace.

Moreover, burnout syndrome components show positive correlations, indicating their tendency to co-occur. Moving to the regression analysis, Table 2 displays the model summary, indicating that occupational stress (OS) significantly predicts burnout syndrome (BS), explaining approximately 53.9% of the variability in burnout syndrome. The subsequent ANOVA table (Table 3) confirms the overall significance of the regression model, further supporting the predictive power of OS on BS.

The coefficients provided in Table 4 revealed the significant contribution of OS to BS, with a standardized coefficient (Beta) of 0.734, highlighting the substantial impact of occupational stress on burnout syndrome. Additionally, the histogram, normal probability plot (P-P plot), and scatter plot validate the regression model's validity and indicate the significant impact of OS on BS. The moderation analysis (Table 5) explores emotional wellbeing (EW) as a potential moderator in the OS-BS relationship. Results suggest that while EW does not moderate this relationship, it significantly influences BS independently. Furthermore, the ANOVA results (Table 6) and coefficients (Table 7) confirm the significant contributions of both OS and EW to BS, with the interaction term (INTTERM) further enhancing the model's predictive power. The moderated multiple regression equation provides insights into the combined effects of OS, EW, and their interaction on BS. This equation underscores the complex nature of the relationships among these variables, emphasizing the need for a nuanced understanding of their interplay.

Finally, the path coefficients (Table 8) elucidate the direct and indirect effects of OS and EW on BS. While OS directly predicts both EW and BS, the indirect effect of OS on BS through EW is not statistically significant, indicating that EW does not mediate the OS-BS relationship. Overall, the results of this study highlight the critical role of occupational stress in predicting burnout syndrome among employees (Senathirajah & Haque, 2022). While emotional wellbeing plays a significant role in influencing burnout independently, it does not moderate or mediate the relationship between occupational stress and burnout syndrome. These findings underscore the importance of managing occupational stress directly to mitigate burnout and promote employee wellbeing in the workplace to maintain sustainable organization development.

### **Implications of the Study**

From a social perspective, understanding the impact of occupational stress on burnout syndrome among female healthcare workers in KSA is important for maintaining wellbeing of workforce (Jiayuan et al., 2018). By recognizing cultural and social factors organization can enhance well-being and job satisfaction of healthcare professionals for sustainable organization development (Chisala et al., 2018). This, in turn, contributes to the overall quality of healthcare services and enhances patient outcomes, benefiting the entire community (Annathurai et al., 2023). Moreover, the investigation into the role of emotional wellbeing as a mediator or moderator in the relationship between occupational stress and burnout has profound implications for individual resilience and coping mechanisms (Khalil et al., 2022a).

By promoting emotional resilience and providing resources for managing stress effectively, both employees and their families can experience improved overall quality of life. From a managerial standpoint, the findings of this study offer actionable insights for organizational leaders in healthcare institutions (Narayanan et al., 2023). Recognizing the impact of occupational stress on burnout underscores the importance of implementing strategies to mitigate stressors and promote employee wellbeing (Osman et al., 2022). This may include measures such as providing adequate staffing levels, offering mental health support services, implementing flexible work arrangements, and fostering a supportive organizational culture (Allam, 2019). Furthermore, understanding the role of emotional wellbeing in the stress-burnout relationship allows managers to tailor interventions more effectively (Adetayo et al., 2022). Overall, the study's findings have the potential to drive positive social change by promoting the wellbeing of healthcare workers and fostering healthier, more sustainable work environments in KSA's healthcare sector (Josephine et al., 2018).

### **Future Scope of the Study**

The research paper titled "Managing Occupational Stress and Burnout in Achieving Employee Wellbeing as Prerequisite for Sustainable Development of Organization" offers a robust foundation

for future exploration within the field of occupational health and organizational psychology. Building upon the outlined objectives, several potential avenues for future research emerge. Firstly, further investigation into the specific sources and manifestations of occupational stress among female healthcare workers in KSA could deepen our understanding of the unique challenges they face. Qualitative studies or surveys focusing on the intersection of gender, culture, and job demands would provide valuable insights. Secondly, exploring the role of emotional wellbeing as a mediator or moderator in the relationship between occupational stress and burnout syndrome offers promising opportunities. In summary, the future scope of this study includes the mediating or moderating role of emotional wellbeing, conducting comparative analyses, and developing targeted interventions to promote sustainable employee wellbeing and organizational development(Allam; Sayeeduzzafar, and Nasir, 2024).”

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