

## Analyzing The Influential Factors of Psychological Health and Employee Performance in Public Health

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### KEYWORDS

Employee performance (EP), public health, workplace, burnout, psychological health, work stress

### ABSTRACT

The purpose of this study was to identify the degree to which industry employee's performance and psychological health within the public health sector are impacted by their workplace, work stress, and burnout. This research employs a quantitative methodology. The samples employed in this study were employees of Industry, which comprised 42 individuals. A questionnaire is used to collect data, which is then analyzed using the SPSS software. We explained the entire process of ensuring the credibility of the data that was collected from the individuals through the questionnaires. According to the findings of this study, it was established that burnout, work stress, and workplace factors influence EP. The evaluation highlights the need of some policies and promising strategies to improve the mental and overall public health. This study also emphasized the need to deal with psychological problems at workplace in order to have healthier and more positive workers.

### 1. Introduction

In modern work environments, particularly in the public health domain, an employee's mental state is a critical factor in determining their overall performance and output [1]. The performance of individual employees determines the efficacy and effectiveness of healthcare systems. Setting goals, allocating resources, supervising employees, and conducting assessments of performance are the initial stages in this process. To guarantee the availability of high-quality healthcare services, it is crucial to make sure that performance management methods are utilized successfully in the healthcare field as well as in any other sector [3]. EP demonstrates how well an individual performs the responsibilities associated with a certain role they hold within an organization. To achieve the greatest possible degree of public health, health improvement is an effort performed by every sector of the country to raise everyone's knowledge, eagerness, and capacity to maintain a healthy lifestyle [2]. Beneficial and preventive measures are given importance at healthcare centers, which are facilities for health services that coordinate public health initiatives and individual health initiatives at the highest level within their service region [4].

Several aspects, like stress management; mental health or mental toughness; and emotional well-being are encompassed under psychological health [5]. Mental health promotion is crucial to ensuring the efficiency of public health workers on both personal and organizational aspects. This industry regularly provides its workers with stressful events, stressful conditions, and the duty to safeguard public health, all of which have adverse effects on their psychological states. Therefore, the levels of worker efficiency and stress must be balanced by acknowledging and controlling the psychological health factors [6]. Furthermore, several organizational outcomes prove the connection between psychological well-being and the efficiency of employees. Mentally healthy employees tend to be more involved, efficient, and innovative than others. Employees possess more effective qualities for handling the complexity and challenges of working in public health, contributing to the enhancement of work output, and organizational development [7]. This study aims to determine the extent to which workplace, work stress, and burnout affect industry employees' psychological state and performance in the public health sector [8].

This research is organized as follows: related works, method, results, and conclusion.

### Related works

In their meta-analysis, [9] estimated the distinct and relative roles played by seven popular leadership philosophies—transformational, transactional, laissez-faire, task-oriented, relationship-oriented, and

destructive—in explaining the mental health of their followers. The characteristics of the epidemic problems that hotel workers felt were investigated [10], and their effects on work-related stress, worker satisfaction, self-rated psychological wellness, behavior towards organizational citizenship, and worker-customer identification were confirmed. The correlations between the suggested variables had substantial impacts, according to the results of the structural equation assessment. The impact of ability, compensation, and training on worker performance was examined [11], as the impact of the factors on worker performance was transmitted through a public health service primary function. According to the research's findings, worker performance factors were significantly impacted by ability, compensation, and training. Competence also significantly affects worker efficiency factors that were handled by prime services, compensation also significantly affects worker efficiency variables controlled by prime services, and training significantly affects worker efficiency factors controlled by prime services [12].

In [13] examined how Tegalsari Public Health Center employees' efficiency was impacted by work inspiration, management style, and work environment implementation. The findings demonstrated the impact of job motivation (0.177) on employees' output. The management style (0.282) had an impact on worker efficiency. The relationship among psychosocial work factors (PWF), employee health, and efficiency among workers employed by Rivers State's public healthcare facilities was investigated by [15]. The findings showed a strong correlation between mental work variables and the well-being and productivity of employees. In [16] examined the impact of management on work ethics, dedication to the organization, and employee efficiency at the Pekanbaru City Public Health Office. The test findings demonstrated that while leadership had an impact on organizational dedication, and work control; however, management had no impact on employee efficiency; organizational dedication had no impact on work control; and work control had no impact on worker efficiency.

## Hypothesis development

**Hypothesis 1:** Effect of work stress on EP

**H0:** Work stress has no substantial impact on EP.

**H1:** Work stress has a substantial impact on the EP.

**Hypothesis 2:** Impact of Burnout on EP

**H0:** Burnout has no substantial impact on EP.

**H1:** Burnout has a substantial impact on EP.

**Hypothesis 3:** Effect of workplace on EP

**H0:** There is no major effect of the workplace on work performance.

**H1:** The workplace has an important effect on work performance

## 2. Methodology

The samples used in this research were employees at industry, which consisted of 42 individuals (respondents). To gather information and data that determine the truth and the appropriate target, the following data collection strategies were employed for this study: (a) questionnaires, which involved the distribution of lists; and (b) library research [14]. This uses academic publications to gather supporting data regarding work stress, the workplace, burnout, and EP. To acquire comprehensive information and data, submit written questions to relevant persons who can offer it. Each variable is evaluated on a 4 – point Likert scale: *Strongly agree (SA)*, *strongly disagree (SDA)*, *Agree (A)*, and *disagree (DA)*. The following are the research indicators for EP in public health's that are shown in Table 1.

Table 1. Definition of operations

Variables	Work stress	Burnout	Workplace	EP
<b>Definition</b>	People who experience job stress may feel unwell, uneasy, or tense as a result of their jobs, workplaces, or specific work-related circumstances.	Stress burnout is a state of exhaustion in both physical and emotional well-being typical of people who work under immense pressure for long durations.	Work is defined as anything that surrounds the employee and can have an impact on his ability to complete the assigned responsibilities.	Performance is an outcome that an organization achieves throughout time, whether it is a nonprofit or profit-oriented company.
<b>Indicator</b>	Workload, time pressure, frustration, Personal and problem-solving roles	Emotional weariness, depersonalization, decreased personal achievement	Workplace environment Connections with officemates	Description of job, quality of jobs, punctuality, and task quantity
<b>Measurement</b>	4 - SA 3 - A 2 - DA 1 - SDA			

## Statistical analysis

The SPSS version 22 software is employed to evaluate all statistical analysis. To examine the hypotheses concerning the impact of workplace, work stress, burnout, and EP, we utilize multiple correlation analysis (MCA) to investigate the strength and direction of connection among continuous variables, Chi-square test is employed to evaluate categorical connections, and a t-test is employed for comparing means among groups.

## 3. Results and discussion

### T-test analysis

The T-test is employed to determine the importance of the connection between 2 variables. From the t-test analysis, if the t-statistic value is less than the critical value (CV), the hypothesis (H<sub>0</sub>) is rejected, and if the t-statistic value is greater than the CV, the hypothesis (H<sub>1</sub>) is accepted. Table 2 displays the outcomes of t-test values.

Table 2. t-test results

$\beta$	7.253	0.499	0.479	0.485
<b>Standard error</b>	4.541	0.129	0.110	0.121
<b>Beta</b>		575	565	570
<b>t</b>	1.585	3.938	3.913	3.925
<b>Sig</b>	0.127	0.000	0.000	0.000

Table 2 indicates that the t-statistic value is higher than the CV. The distribution t - t-percentage point displays CVs. Thus H<sub>1</sub> is accepted, and H<sub>0</sub> is rejected for the workplace (3.938 > 1.6926), indicating that there is a consistent influence of the workplace (independent) on EP (dependent). Therefore, for the work stress (3.913 > 1.6926), H<sub>1</sub> is accepted and H<sub>0</sub> is rejected, suggesting that the work stress (independent) consistently influences EP (dependent). Consequently, H<sub>1</sub> is approved and H<sub>0</sub> is rejected for the burnout (3.925 > 1.6926), indicating that EP (dependent) is regularly influenced by the burnout (independent). The findings of the hypothesis test have demonstrated that variables related to workplace, burnout, and work stress together had a favorable impact on EP in public health.

### Chi-square test

Table 3 displays the findings of Chi-square analyses looking at how different factors affect EP. The impacts of stress, burnout, and the workplace are the three hypotheses that are listed. Given that the estimated Chi-square value (16.66) with  $df = 1$  and a significance level of 0.05 exceeds the CV of 3.841 for the impact of EP on work stress. Considering that the CV of 3.841 for the relationship between EP and burnout is exceeded by the calculated Chi-square value (12.34) with  $df = 1$  and a level of significance is 0.05. Given that the computed Chi-square value (9.87) with  $df = 1$  and a level of significance of 0.05 exceeds the crucial value of 3.841 for the association between EP and work stress. The results show significant connections ( $p < 0.05$ ), indicating a considerable impact of environmental variables, burnout, and stress on EP results.

Table 3. Result of Chi-square test

Hypothesis	Chi-square ( $\chi^2$ )	df	p – value
Effect of work stress on EP	16.66	1	< 0.05
Effect of Burnout on EP	12.34	1	< 0.05
Effect of the workplace on EP	9.87	1	< 0.05

### Multiple correlation analysis (MCA)

MCA evaluates the direction and strength of connections between different independent variables and one dependent variable simultaneously. It assesses how effectively a set of variables clarifies or anticipates the result, offering information about the overall impact of all predictors. The findings of the MCA are shown in Table 4.

Table 4. MCA result

<b>R</b>	<b>0.574a</b>
<b><math>R^2</math></b>	0.331
<b>Adjusted <math>R^2</math></b>	0.287
<b>Standard error of the estimate</b>	1.826
<b><math>R^2</math> change</b>	0.331
<b>F change</b>	7.747
<b>df1</b>	3
<b>df2</b>	33
<b>Sig. F change</b>	0.002

A moderate association is indicated by the correlation coefficient (R), which is 0.574a. The independent factors account for a 33.1% variance in the variable (dependent) according to the  $R^2$  value of 0.331. One model is shown to be highly significant by the significance (0.002) and F change (7.747)

### 4. Conclusion and future scope

Study investigated the impacts of workplace, burnout, and work stress on EP in public health. The data was collected utilizing 42 individuals from the industry. According to t-test findings, t-statistic values higher than the crucial value show that all three factors have substantial effects on EP in public health. The substantial relationships ( $p < 0.05$ ) between all variables and EP were verified using chi-square tests. The results of MCA indicated a moderate relationship ( $R = 0.574a$ ), with independent variables representing 33.1% of the variance in EP. The findings showed that factors related to burnout, work stress, and the workplace had a significant effect on EP in public health. Limitations include the possibility of response bias in the self-reported psychological wellness information, the challenge of determining causal connections because of the cross-sectional methodology, and the effect of organizational environment differences on the generalizability of the results. Future research should reduce response bias by including objective indicators, employing longitudinal designs to show causality, and considering varied organizational settings to improve the generalizability of the

psychological wellness results.

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