

Research Proposal

Course: Quantitative Research Methods

Course Code: LCDB7011

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Topic

“The Impact of Work Stress on Employee Productivity”

Database (Dataset Source)

This study will use secondary survey data from Kaggle, a widely used open data platform that provides datasets for research and data analysis.

The selected dataset is:

- Employee Stress and Productivity Dataset from <https://www.kaggle.com/>

The dataset contains more than 150 responses, which satisfies the minimum requirement for this research. It includes variables such as:

Employee stress level

- Working hours
- Job satisfaction
- Productivity rating
- Age and gender

Background

Work-related stress has developed into a major issue in the context of modern organizations, owing to the growing demands of the job, the dynamic nature of technology, and the performance demands. Employees face tremendous demands, time constraints, and complexities at the workplace, which may result in psychological and emotional stress. When the demands of the job exceed the individual's capacity to deal with the situation, stress may develop, which may influence the individual's performance. Therefore, the impact of work-related stress on employee productivity has become the focal point of organizational behaviour and human resource management.

One of the most influential frameworks explaining workplace stress is the Job Demand–Control Model, developed by Robert Karasek. According to this model, job stress occurs when employees experience high job demands while having limited control over their work tasks or decision-making. Under such conditions, employees may experience psychological strain, which can negatively influence their motivation, performance, and productivity (Karasek, 1979). This theory has been widely used to explain the relationship between workplace conditions and employee outcomes.

Early research on occupational stress by Cary L. Cooper and Judy Marshall also highlighted several sources of workplace stress, including excessive workload, role ambiguity, poor working relationships, and lack of organizational support. Their study suggested that prolonged exposure to these stressors can lead to decreased employee wellbeing and reduced job performance (Cooper and Marshall, 1976). These findings emphasized the importance of understanding how organizational environments contribute to employee stress.

Further research by Donald F. Parker and Thomas A. DeCotiis examined organizational factors influencing job stress and found that high levels of stress can significantly affect employee attitudes, including job satisfaction, motivation, and performance (Parker and DeCotiis, 1983). Their research also contributed to the development of measurement scales widely used in stress research.

More recent empirical studies have continued to explore the relationship between workplace stress and employee productivity. For example, research conducted by Tina Bui and colleagues found that higher levels of perceived stress among employees were associated with lower productivity and reduced job satisfaction (Bui et al., 2021). Similarly, Samson Sunday Adaramola reported that psychological and emotional pressure at work can reduce employees' ability to perform tasks effectively, ultimately affecting productivity (Adaramola, 2012).

However, the existing literature suggests that work-related stress is one of the key factors that impact the productivity of the employees. Though at times, a level of stress may act as a motivator towards better performance, excessive levels of stress may act as a barrier to efficiency, job satisfaction, and performance. Therefore, it is essential to understand the relationship between work-related stress and the productivity of the employees.

Aim

The aim of this study is to examine the relationship between work stress and employee productivity using quantitative analysis of secondary survey data.

Objectives

The study will pursue the following objectives:

- To identify the level of work stress experienced by employees.
- To examine the level of employee productivity within the dataset.
- To analyse the relationship between work stress and employee productivity.
- To determine whether work stress significantly affects employee productivity.

Research Questions

This research will address the following questions:

- i. What is the level of work stress among employees?
- ii. What is the level of employee productivity in the dataset?
- iii. Is there a relationship between work stress and employee productivity?
- iv. Does work stress significantly influence employee productivity?

Theory Selected or Identified

This research is based on Job Demand–Control Model, developed by Robert Karasek. The theory suggests that employee stress occurs when job demands are high and employees have limited control over their work. When stress levels increase, employee performance and

productivity may decline due to reduced motivation, fatigue, and emotional strain. This theory provides a useful framework for understanding how workplace stress can influence employee productivity.

Hypotheses

Based on the conceptual framework, the following hypotheses will be tested:

H₀: There is a significant relationship between work stress and employee productivity among employees.

H₁: There is a no significant relationship between work stress and employee productivity among employees.

References

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