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# THE INFLUENCE OF PHYSICAL ENVIRONMENT, PSYCHOLOGICAL FACTORS, AND WORK FATIGUE ON THE PERFORMANCE OF AUDITORS WITH WORK STRESS AS AN INTERVENING VARIABLE AT THE GENERAL INSPECTORATE OF THE MINISTRY OF MANPOWER: A CONCEPTUAL MODEL

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## ABSTRACT

The performance report from 2020 to 2022 of the Inspectorate General of the Ministry of Manpower of the Republic of Indonesia reveals several concerning trends. Many program performance indicators have declined and failed to meet their targets during this period. Specifically, in 2020, 24.11% of the audit result reports did not meet the standards, with 27.12% in 2021 and 32.52% in 2022, indicating a worsening trend over the years. This suggests that auditors have struggled to achieve the expected results, primarily due to a significant number of audit reports not meeting the required standards within the designated timeframe. Physical environment, psychological factors, work fatigue, and work stress are known to influence performance. This quantitative study aims to examine the influence of physical environment, psychological factors, and work fatigue mediated by work stress on auditor performance.

## Keywords

Physical Environment, Psychological Factors, Work Fatigue, Auditor Performance, Work Stress, Conceptual Model.

## INTRODUCTION

Based on the performance report from 2020 to 2022 of the Inspectorate General of the Ministry of Manpower of the Republic of Indonesia, it is known that there are many performance indicators of programs that have declined and have not reached their targets. Additionally, in 2020, there were 27 audit result reports out of 112 reports that did not meet the standards, accounting for 24.11%. In 2021, out of 118 reports, there were 32 reports that did not meet the standards, or 27.12%, and in 2022, out of 123 reports, there were 40 reports that did not meet the standards, or 32.52%. The available data indicates an interesting phenomenon: auditors have not been able to fully achieve the expected results. This is due to the large number of audit reports that have not met audit standards within the specified timeframe.

This study delves into the multifaceted factors influencing performance, including psychological, individual, and organizational aspects. Psychological factors and individual characteristics are foundational in shaping one's ability to achieve optimal performance. Research findings vary regarding the impact of the work environment on employee performance, with some studies suggesting a positive correlation, while others show no significant influence.

Psychological factors encompass elements influencing workforce activities due to interpersonal relationships, roles, and responsibilities in the workplace. Several phenomena suggest suboptimal work activities for performance audit teams, such as incomplete task implementation and limited time for performance audits compared to workload.

Addressing work fatigue complaints is crucial, given its significant impact on workplace accidents due to reduced physical and mental capabilities. Studies show a mixed impact of job stress on performance, with some indicating a positive correlation, while others suggest a negative influence or no significant impact.

## LITERATURE REVIEW

### A. Physical Environment

The working environment, as highlighted by Siagian (2014:56) and Sedarmayanti (2013:23), serves as a critical determinant of employee morale and productivity. Comprising both physical and non-physical elements, it encompasses the surroundings where employees execute their daily tasks and the social dynamics that influence their work experience. The physical aspect, including workspace design, equipment availability, and amenities like rest areas and religious facilities, plays a pivotal role in providing employees with a conducive setting for optimal performance. Additionally, the non-physical environment, characterized by harmonious relationships between colleagues and supportive leadership, fosters job satisfaction beyond mere financial rewards.

Understanding the two main types of working environments, physical and non-physical, is essential for organizational leaders seeking to enhance employee efficiency. The physical environment, as outlined by Siagian (2014:57) and Sedarmayanti (2011:26), encompasses tangible factors such as cleanliness, lighting, air circulation, color schemes, music, temperature, and decoration. These elements significantly influence employees' comfort, health, and overall well-being, directly impacting their job performance and satisfaction. Moreover, the non-physical environment, characterized by positive interpersonal relationships and effective communication, contributes to a supportive work culture that enhances employee motivation and engagement.

By recognizing the importance of both physical and non-physical aspects of the working environment, organizations can create a holistic approach to improve employee satisfaction and performance. Investing in workspace design, amenities, and fostering positive relationships among employees and leadership can lead to a more productive and harmonious workplace. Furthermore, regularly evaluating and addressing the various indicators of the working environment, as suggested by Sedarmayanti (2011:27), allows organizations to adapt and optimize their surroundings to meet the evolving needs and preferences of their workforce, ultimately driving organizational success.

The research results of Hastutiningsih (2018) prove a significant negative influence of the work environment on employee job stress. Susiarty (2019) demonstrated that workload has a significant positive effect on job stress. Darmayanti (2018) in her study proved that the work environment positively influences auditor performance, where a better work environment leads to improved employee performance. Similarly, Surijadi and Musa (2020), Putri and Rahyuda (2019), Widarta (2019), Susiarty (2019) showed that the work environment has a positive effect on employee performance.

### B. Psychological Factors

Robbins & Judge (2014) define psychology as the study aimed at measuring, explaining, and occasionally altering human and other beings' behavior, particularly focusing on individual behaviors. This perspective on psychology is crucial in understanding the intricacies of human interaction within organizational settings, as highlighted by the Minister of Manpower Regulation of the Republic of Indonesia No. 5 of 2018. The regulation emphasizes the significant impact of psychological factors on work activities, particularly concerning interpersonal relationships, roles, and responsibilities, thereby acknowledging the vital role of psychology in shaping workplace dynamics and employee well-being.

The six psychological factors identified in the regulation encompass issues like role ambiguity, role conflict, qualitative and quantitative work overload, career development, and responsibility towards others. Each of these factors presents unique challenges that can affect employee performance, job satisfaction, and overall organizational effectiveness. By addressing these psychological factors, organizations can foster healthier work environments and enhance employee engagement and productivity, aligning with the broader goal of creating sustainable and thriving workplaces.

Lazarus and Folkman (1984) proposed that job stress occurs when individuals experience an imbalance between job demands and the resources they have to cope with them. Additionally, other research by Cooper and Marshall (1978) indicated that psychological factors such as perceived control over work, level of autonomy in decision-making, and perception of social support in the workplace can influence the level of job stress. John Minner in Sari and Chadliyanto (2016) stated that psychological factors can play a role in all individual aspects related to work and organization. Yunita et al. (2016) found that personality-job fit and psychological capital have a positive influence on performance. Silen (2016) in his research also demonstrated that psychological resources have a positive and significant impact on employee performance. Fanani et al. (2008) showed a significant negative influence of role conflict on auditor performance.

### C. Work Fatigue

The concept of work fatigue is multifaceted and deeply ingrained in daily life, characterized by a diminished ability to engage in activities due to various causes. According to Tucker and Folkard (2012), work fatigue encompasses biological drives for recuperative rest, which may manifest as sleepiness, mental, physical, or muscular fatigue. This understanding underscores the diverse nature of fatigue and its impact on individuals' overall well-being and work performance. Suma'mur P.K. (2014) further elaborates that fatigue entails both physical and mental states of exhaustion, resulting in decreased work capacity and resilience. It is regulated centrally by the brain, with factors such as prolonged activity influencing the balance between activation and inhibition in the central nervous system.

The symptoms of work fatigue are varied and may include decreased attention, feelings of heaviness, bodily discomfort, difficulty thinking or concentrating, and emotional disturbances. Chronic fatigue, stemming from continuous and cumulative factors, can lead to increased irritability, apathy towards work, and severe depression. Glimer and Cameron (cited in Setyawati K.M., 2011) identify common symptoms of work fatigue as decreased alertness and attention, antisocial behavior, depression, loss of energy, and physical ailments such as headaches and digestive issues. These symptoms serve as indicators of the debilitating effects of work fatigue on individuals' physical, mental, and emotional well-being.

Suma'mur (1996, cited in Tarwaka, 2015) outlines indicators of work fatigue, including diminished activity, motivation, and physical well-being. Signs such as feelings of heaviness, difficulty concentrating, and physical discomfort signal the onset of fatigue. Motivational decline may manifest as decreased initiative, difficulty focusing, and reduced confidence. Physical symptoms such as headaches, muscle stiffness, and shortness of breath further contribute to the overall experience of work fatigue, highlighting the complex interplay between physical and psychological factors in determining individuals' capacity to cope with work demands.

Sonnentag and Fritz (2015) found that work fatigue is positively related to job stress, where the higher the level of work fatigue experienced, the higher the level of job stress perceived by individuals. Additionally, other research by Demerouti et al. (2001) revealed that work fatigue has a significant positive influence on the level of job stress experienced by individuals.

#### **D. Work Stress**

Work stress is an undeniable aspect of everyday life, particularly within the workplace where it has significant potential to impact employee productivity. It manifests as a condition of tension affecting emotions, cognitive processes, and one's response to environmental changes, characterized by both physical and mental symptoms. Husein Umar (2008) defines work stress as a state of tension influencing emotions, cognitive processes, and an individual's condition. Robbins (2005) and Warsito (2008) further elaborate that stress is an internal experience creating physical and psychological imbalances in response to external environmental, organizational, or interpersonal factors.

The sources of work stress, or stressors, are categorized into three main areas: environmental factors, organizational factors, and individual factors. Environmental factors such as economic, political, and technological changes can induce stress due to the rapid adjustments required. Within organizations, role demands, interpersonal dynamics, organizational structure, and leadership styles can all contribute to stress among employees. Additionally, individual factors stemming from personal issues like family problems or economic struggles can exacerbate stress levels. The consequences of work stress are far-reaching, impacting not only work activities but also external activities and overall organizational commitment.

Work stress can manifest in various ways and is categorized into physical, psychological, and behavioral symptoms. Physical symptoms may include changes in metabolism, increased heart rate, headaches, and digestive issues, while psychological symptoms can result in dissatisfaction, confusion, and increased anxiety. Behavioral symptoms may lead to decreased productivity, increased absenteeism, and changes in habits such as smoking or alcohol consumption. Recognizing and managing work stress is crucial for maintaining employee well-being and organizational effectiveness.

Karim et al. (2022) concluded that there is a negative relationship between job stress and auditor performance, where high levels of job stress can reduce the quality of auditor performance. Another study by Ardiyanto (2018) revealed that job stress can negatively affect auditor performance. Previous research by Hastutiningsih (2018) proved that the work environment's influence on performance through job stress has a positive and significant effect on accepted performance. Alfraih (2018), Alharbi et al. (2020), and Tarmidi et al. (2021) show that job stress indeed mediates the relationship between psychological factors and auditor performance. Alfraih (2018) and Ahmad et al. (2019) prove that job stress mediates the relationship between work fatigue and auditor performance.

#### **E. Auditor Performance**

The definition of internal auditor performance encompasses the outcomes achieved in specific job functions or activities within a defined time frame. Bernardin and Russel (2011) emphasize that performance is the result of tasks completed by an employee within a specified period. Similarly, Wayne F. Cascio (2012) states that performance refers to an employee's accomplishment of assigned tasks. In the context of auditors, performance refers to the actions or completion of examination tasks within a specific time frame. It signifies the results achieved by auditors in carrying out their responsibilities and serves as a benchmark to determine the effectiveness of their work.

Standards govern the performance of internal auditors, ensuring adherence to regulations to achieve desired examination outcomes. The Institute of Internal Auditors (2017) outlines several standards for internal auditor performance, including managing internal audit activities, fundamental job nature, assignment planning, execution, communication of assignment results, monitoring progress, and communicating risk acceptance. These standards cover various aspects such as managing internal audit activities effectively, planning assignments based on risk, evaluating governance processes, risk management, and organizational controls, as well as executing, documenting, supervising, and communicating assignment results.

Performance measurement is vital for evaluating deviations from established plans, adherence to schedules, and the fulfillment of performance objectives. Wibowo (2016) suggests several methods for performance measurement, including ensuring customer requirements are met, establishing performance standards for comparison, providing visibility for monitoring, prioritizing quality

issues, avoiding consequences of low quality, considering resource utilization, and providing feedback for improvement efforts. Auditors' performance relates to the quality, quantity, and timeliness of their work. Fogarty's indicators cited by Putri (2015) include work quality, quantity, and timeliness, which are crucial metrics for evaluating auditor performance.

The objectives of performance appraisal, as outlined by Anwar Prabu Mangkunegara (2014), include enhancing mutual understanding of performance requirements among employees, recognizing and motivating employees to improve or maintain their performance, providing opportunities for employees to discuss their aspirations, defining or redefining future goals to motivate employees to realize their potential, and reviewing training and development plans to ensure alignment with organizational needs. Performance appraisal serves as a comprehensive process for assessing how well employees have performed their tasks over a specific period, aiming to enhance employee motivation, career development, and organizational effectiveness.

## CONCEPTUAL MODEL

Based on the literature review above, the conceptual model is formulated as follows:

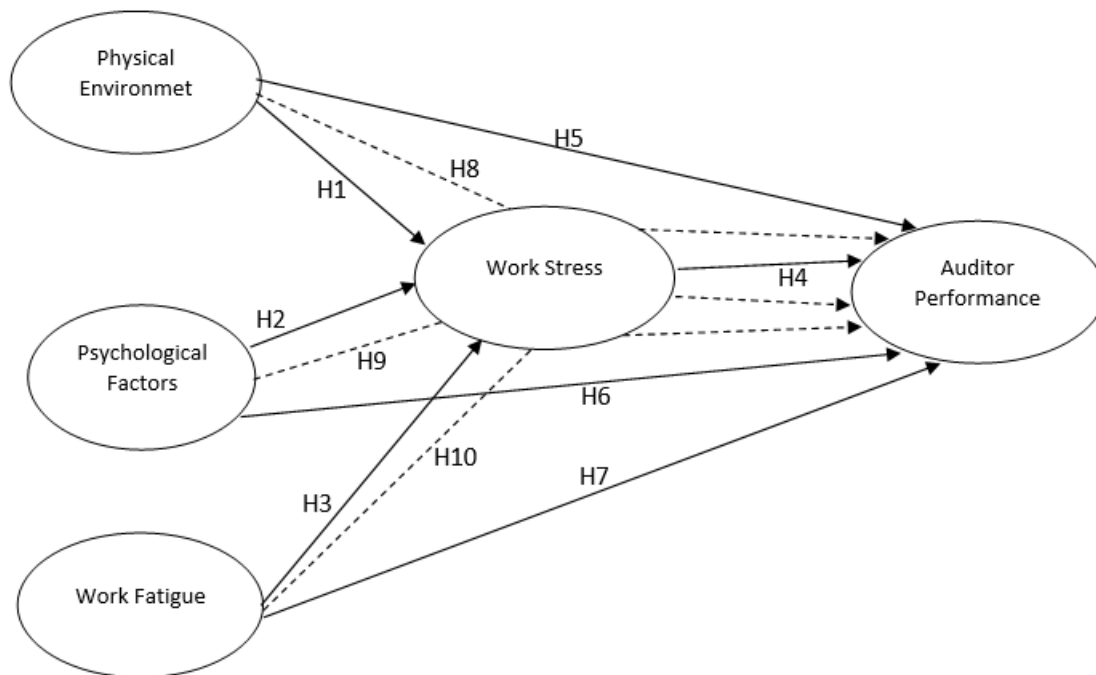


Figure 1. Conceptual Model

## HYPOTHESES

Based on the conceptual model and literature review, the hypotheses can be formulated as follows:

- H<sub>1</sub>: Physical environment has a significant negative impact on work stress.
- H<sub>2</sub>: Psychological factors have a significant negative impact on work stress.
- H<sub>3</sub>: Work fatigue has a significant positive impact on work stress.
- H<sub>4</sub>: Work stress has a significant negative impact on auditor performance.
- H<sub>5</sub>: Physical environment has a significant positive impact on auditor performance.
- H<sub>6</sub>: Psychological factors have a significant positive impact on auditor performance.
- H<sub>7</sub>: Work fatigue has a significant negative impact on auditor performance.
- H<sub>8</sub>: Physical environment has a significant positive impact on auditor performance through work stress as an intervening variable.
- H<sub>9</sub>: Psychological factors have a significant positive impact on auditor performance through work stress as an intervening variable.
- H<sub>10</sub>: Work fatigue has a significant negative impact on auditor performance through work stress as an intervening variable.

## METHODOLOGY

This study applies a quantitative method that is associative in nature, utilizing surveys and questionnaires as data collection instruments. The population in this research consists of internal auditors at the Inspectorate General of the Ministry of Manpower of the Republic of Indonesia in 2023, totaling 69 auditors. The sampling technique employed is nonprobability sampling with a saturation

sampling technique (census), resulting in a sample size of 69 participants in this study. Data for the research are obtained from questionnaires, observations, interviews, and literature review. The analysis conducted in this study includes descriptive analysis, path analysis, and hypothesis testing.

## CONCLUSION

This study aims to develop a conceptual model regarding the influence of the physical environment, psychological factors, and work fatigue on auditor performance, mediated by work stress. The research encompasses background information, a literature review, hypotheses, and research methodology. The status of the influence of the physical environment, psychological factors, and work fatigue on auditor performance, through the mediation of work stress, can be understood by applying the conceptual model proposed in this study.

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