Job Stress as Mediating Factor For Creating Employee Performance: A Literature Review

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ABSTRACT

This study aims to examine previous research in order to determine the role of job stress as a variable that mediates the effect of workload and work environment on employee performance. This study applies various theories, namely the theory of Job Demand Resources (JDR), and Conservation of Resources (COR) to explain the relationship between variables. As a literature study article, this article contributes to developing a conceptual framework on how to combine two different perspectives of Job Demand Resources (JDR), and Conservation of Resources (COR). This article is important for management and further research considering that not many previous studies have used this theoretical framework to test a similar research model. This study has limitations in obtaining research that examines workload, work environment in research with employee performance. However, this research brings out a new framework that illustrates the contribution of job stress to employee performance through workload and work environment.

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Keywords: Employee Performance, Job Stress, Workload, Work Environment

I. Introduction

A company organization was founded because it has certain goals to be achieved. In achieving its goals every organization is influenced by organizational behavior [1]. One of the activities that need to be considered in the organization is employee performance, namely how to do everything related to a job or role in the organization [2], [3]. Understanding performance is a description of the level of achievement of the implementation of an activity program or policy in realizing the goals, objectives, vision and mission of the organization which is carried out through strategic planning of an organization. The meaning of the word “performance” comes from the words “job performance” and is also called “actual performance” or “work performance” or the actual achievement that has been achieved by an employee [3]. According to [4], [5] performance comes from the notion of performance, which gives an understanding of performance as a result of job performance, but actually performance has a broader meaning, not just the result of work, but including how the work process takes place.

According to [6] revealed that performance is a translation of performance which means the work of a worker, a management process or an organization as a whole, where the results of the work must be shown concrete evidence and can be measured with predetermined standards. Furthermore, according to [7] performance is the result of work that can be achieved by a person or group of people in an organization, in accordance with their respective authorities and responsibilities, in order to achieve the goals of the organization concerned legally, not violating the law, and in accordance with morals and ethics. Performance is a work achieved by a person in carrying out the tasks assigned to him based on skills, experience, sincerity and time [8]. Performance is the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him [9], [10]. Based on the above definition it can be concluded that performance is the result of work that can be achieved by a person or group of people in an organization, in accordance with the respective authorities and responsibilities that have been determined or have been determined by the organization, in an effort...
to achieve the goals of the organization concerned legally does not violate the law and in accordance with morals and ethics.

[11] states that employee performance can be measured from three aspects, namely task performance, contextual performance and counterproductive performance. Task Performance consists of (1) Finishing work on-time; (2) Keep focus on the achievement; (3) Setting priorities; (4) Carrying out work efficiently; (4) Manage time well [11]. Contextual Performance is measured from (1) Starting new task; (2) Taking challenging tasks; (3) Keeping knowledge up-to-date; (4) Keeping the skills up-to-date; (5) Creating creative solutions; (6) Taking extra responsibilities; (7) Soughting new challenge; (8) Participate actively in meetings. Meanwhile Counterproductive performance is measured by (1) Complaining about small issues; (2) Make the problems bigger; (3) Focuses on negative situations; (4) Talking to colleagues about negative aspects; (5) Talking to outsiders about negative aspects [11].

According to [12] the factors that affect performance are ability factors and motivational factors. In line with the theory of Job Demand Resources developed by [13]. Job demands refer to the physical, psychological, social or organizational aspects of a job that require certain physical and/or psychological efforts or abilities. Examples are high work pressure, unsupported physical working environment conditions, and emotional interactions with stakeholders. Job Demand Resources theory assumes that there are two processes that affect pressure and performance. Job demands can lead to fatigue and other health complaints, so they are related to pressure or stress at work [14]. On the other hand, job resources are related to things that can potentially motivate employees so that they have positive results such as increasing employee performance [15]. Research conducted by [16]–[20] found that stress correlates workload with overall employee performance.

The theory of Conservation of Resources (COR) presents a comprehensive process of how stress occurs and how individuals respond to stress. The main principle in this theory is that individuals strive to maintain, protect and build resources such as social support, personal characteristics, time and energy [21], [22] Resources are valued because they not only have an instrumental value in offering people the means to achieve their goals, but also carry a symbolic value that identifies individuals who they really are. Humans try to create situations with a surplus of resources and avoid situations that lead to loss of resources, because in the end it can cause psychological discomfort or stress [23]. When individuals are not threatened by stressors, they are motivated to acquire, retain and invest the necessary resources to meet the demands of their work, and to accumulate excess resources for potential future stress. However, when faced with chronic stress, individuals seek to conserve their remaining resources and protect themselves from the potential for further resource loss and depletion [23]–[25]. Therefore, to achieve this, employees try to distance themselves from stress by investing some resources to engage in passive and defensive behavior [10], [26]. Departing from the theory of Conservation of Resources (COR) workload and work environment have an influence on work stress [27].

Based on Job Demand Resources theory and Conservation of Resources (COR) theory which describes internal and external factors that influence employee performance [28]. Meanwhile, several studies have developed a theoretical review of workload, work environment and job stress on employee performance. This article fills the gap and establishes a framework for job stress as a mediating variable that reflects the internal state of the company. The author intends to examine theoretically, first, how workload determines employee performance either directly or indirectly through job stress? Second, how does the work environment identify employee performance either directly or indirectly through job stress? Third, how does job stress contribute to employee performance? The author leaves further study to answer the question by applying appropriate data. Introduction becomes the first part of the article structure. In the second part, the author discusses the methods used in this literature review. The third section describes the results, including workload, work environment, job stress and employee performance, discusses the propositions derived from the relationship between these variables, and provides a discourse on the relationship between the four variables in a developing country context. The authors point out the limitations of role and work stress measurement and suggest further study to address this issue in the next section. The last section states the conclusion.

II. Method

This section focused on discussing the methodology of the research. This study aims to see if there is a theoretical reason to explain the influence of workload and work environment, either
directly or indirectly, on employee performance. In line with this goal, the author provides an overview of several empirical studies on the relationship between variables. The author sets two stages in the writing method. First, the authors selected material for review, including extensive articles available in the form of research papers and literature review papers, as well as books, and proceedings on workload, work environment, job stress and company performance. In the selection process, such as Academy of Management, Emerald Group Publishing, Elsevier BV, JSTOR, Sage Publication, and Wiley Online.

![Conceputal model](image)

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Fig. 1. Conceptual model

After that, the authors compile relevant papers using certain keywords, such as "Workload and Job Stress", "Workload and Employee Performance", "Work Environment and Job Stress", "Work Environment and Employee Performance", "Job Stress and Employee Performance", "Theory of Job Demand Resources (JDR) and Job Stress", and "Theory of Conservation of Resources (COR) and Employee Performance". This study combines keywords and the forward snow-ball method as a search strategy. Throughout the selected papers, the authors examine the papers and summarize the main hypotheses and findings to ensure that all articles qualify. After going through the article selection stage, the authors obtained 85 titles consisting of 20 research papers, 30 empirical studies and 1 literature review.

### III. Result and Discussion

#### A. Workload and Job Stress: Job Demand Resources (JDR) Perfective

Workload according to [29], [30] can be defined as a difference between the capacity or ability of workers and the demands of the work that must be faced. Considering that human work is mental and physical, each has a different level of loading. The level of loading that is too high allows the use of excessive energy and over-stress occurs, on the contrary the intensity of the load that is too low allows boredom and saturation or under-stress. Therefore, it is necessary to strive for the optimum level of loading intensity that exists between the two extreme limits and of course differs from one individual to another. According to [31] workload is the volume of work results or records of work results that can show the volume produced by a number of employees in a certain section. The amount of work that must be completed by a group or person in a certain time or workload can be seen from an objective and subjective point of view. Objectively is the total time used or the number of activities carried out. While the workload subjectively is a measure used by a person to statements about feelings of being overloaded, a measure of work pressure and job satisfaction.

Workload as a source of dissatisfaction is caused by work overload [28].

According to [32] there are three ways that can be used to measure workload, namely; Work Sampling, study time and motion, and daily logs. [32] describe Work Sampling as a technique developed in the industrial world to see the workload occupied by personnel in a particular unit, field or type of workforce. In work sampling we can observe the following: (1) Activities that are being carried out by personnel during working hours; (2) The relationship between personnel activities and their functions and duties during working hours; (3) The proportion of working time used for productive or unproductive activities; (4) The pattern of personnel workload is related to the

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time and schedule of working hours. While time and motion study as a technique carried out by carefully observing the activities carried out by the personnel being observed. In the time and motion study, observers can also observe the following: (1) Activities that are being carried out by personnel during working hours; (2) The relationship between personnel officers and their functions and duties during working hours; (3) The proportion of working time used for productive or unproductive activities; (4) The pattern of personnel workload is related to the time and schedule of working hours. Furthermore, the Daily log is a simple form of work sampling, where the people being studied write down their own activities and the time spent for these activities. The use of this technique is highly dependent on the cooperation and honesty of the personnel under study [32].

According to [33] workload is influenced by various very complex factors, both internal and external factors. The external factors that affect the workload are burdens that come from outside the employee's body, in the form of (1) The tasks carried out are physical such as workloads, work stations, work tools and facilities, work conditions or fields, work aids, and others. other; (2) Organization consisting of length of work time, rest time, and shift work, (3) Work environment which includes temperature, intensity of lighting, dust, and employee-employee relations. Meanwhile, the internal factors that affect the workload are factors that come from within the body itself as a result of a reaction from the external workload. [34], [35] shows that workload affects job stress. The results of this study are also supported by [36] states that the results of the study show that workload and work stress have a significant positive effect on turnover intention, and workload has a significant positive effect on job stress.

In line with the Job Demand Resources theory [15] which states that job demands and job resources are two major factors that determine the achievement of organizational outcomes. Job demands are negatively related to resources, namely with available resources. high work demands can reduce work demands. High work demands can increase stress, on the other hand high resources can reduce stress. Excessive workloads will have an adverse impact, which will cause fatigue both physically and mentally and emotional reactions such as headaches, indigestion, and irritability. While the workload is too little where the work that occurs due to reduced motion will cause boredom. Boredom in the work done or too little work results in a lack of attention to work so that it is potentially harmful to workers [37], [38]. Meanwhile, the effect of workload on performance is mediated by job stress ([34], [37], [39]-[44].

Based on the theory and empirical experts described earlier, this study uses indicators of workload as follows (1) work speed; (2) Work hard; (3) Overwork; (4) Adequacy of time; (5) Conflicting demands; (6) Concentration intents; (7) Task interruption; (8) Hectic jobs; (9) Waiting for assignments from colleagues [45]. Based on the description, it describes how the workload mechanism directly or through the contribution of job stress determines the achievement of employee performance. Job stress can play an important role in the process of achieving optimal employee performance. However, there are still limited researchers who examine the role of job stress as a mediator in this context.

Proposition 1. Workload Creates Employee Performance.

Proposition 2. Workload Creates Employee Performance through job stress.

B. Work environment and job stress: Conservation of Resources (COR) Perfection

The work environment in a company is very important for management to pay attention to [46]. Although the work environment does not carry out the production process in a company, the work environment has a direct influence on the employees who carry out the production process. The work environment is an atmosphere where employees carry out daily activities [19]. A conducive work environment provides a sense of security and allows employees to work optimally. If the employee likes the work environment in which he works, then the employee will feel at home at work, carrying out his activities so that work time is used effectively [47]. On the other hand, an inadequate work environment will reduce employee performance. According to [48] the environment is institutions or outside forces that have the potential to affect organizational performance, the environment is formulated into two, namely the general environment and the special environment. The general environment is anything outside the organization that has the potential to influence the organization. The environment is in the form of social and technological conditions. While the special environment is the part of the environment that is directly related to the achievement of the goals of an organization.

[49] mentions the work environment as a series of factors that affect the performance of human resource management functions or activities consisting of internal factors originating from within the organization. The work environment is something that exists in the workers’ environment that
can affect themselves in carrying out tasks such as temperature, humidity, ventilation, lighting, noise, cleanliness of the workplace and whether or not work equipment is adequate [50]. According to [51] the work environment can be interpreted as the entire tooling faced, the surrounding environment in which a person works, the method of work, as the influence of his work both as individuals and as a group. Meanwhile, according to [52] the work environment is an environment where employees do their daily work. Based on some of the definitions above, it can be concluded that the work environment is everything that is around the workers/employees that can affect employee job satisfaction in carrying out their work so that maximum work results will be obtained, where in the work environment there are work facilities that support employees in completing tasks, which is imposed on employees in order to improve the work of employees in a company.

[53] mention that to create a good work environment there are several things that must be considered, namely; (1) Workplace building; (2) Spacious workspace; (3) Air exchange ventilation; (4) Availability of places of religious worship; (5) The availability of special and public transportation facilities for employees is comfortable and easy. [54] explained about the work environment which has several parts or can also be called the forming aspects of the work environment. The sections can be described as follows; (1) Work service. Employee service is the most important aspect that must be carried out by every company towards the workforce. Good service from the company will make employees more passionate about work, have a sense of responsibility in completing their work, and can continue to maintain the good name of the company through their work productivity and behavior; (2) The working conditions of employees should be endeavored by the management of the company as well as possible in order to create a sense of security in working for their employees, these working conditions include adequate lighting, proper air temperature, controlled noise, color effects, necessary space for movement and work safety. employee; (3) Employee relations will be very decisive in producing work productivity. This is because there is a relationship between motivation and enthusiasm and enthusiasm for work with a conducive relationship between fellow employees at work, incompatible relationships between employees can reduce motivation and enthusiasm which consequently will reduce work productivity.

[51] The work environment is the whole of the tools and materials encountered, the surrounding environment in which a person works, his work methods, and work arrangements both as individuals and groups. The work environment is one of the factors that determine employee performance. Employee performance is one of the keys to the company’s success to achieve success. Therefore, every company must have an appropriate work environment for the continuity of employee work and improve employee performance. Research shows that the work environment variable has a very significant influence on employee performance [55]–[58]. A supportive work environment is one that has the ability to involve employees with their performance. Conservation of Resources [21] is a theory that discusses human behavior that can generate and shape resources for organizations. Conservation of Resources [21] states that each individual as a resource in the organization can maximally provide great benefits to the organization if it is supported by a good work environment. [58], [59] states that a good work environment one of which increases production and employee performance which in turn will increase organizational effectiveness and can reduce costs incurred by the company. The research conducted by [17] in six different industries in Vietnam shows that the work environment and work stress can affect employee performance. The results of this study also state that job stress mediates the effect of the work environment on employee performance.

Based on the theory and research results described earlier, the work environment in this study consists of two aspects, namely workforce engagement and health, safe environment. Meanwhile, workforce engagement is calculated from (1) Decision input; (2) Communications; (3) Respectful and trusting relationships; (4) Supportive supervisors; (5) Supportive co-workers. Meanwhile, health and safe environment are measured by (1) Collaboration; (2) Recognition and feedback; (3) Fair processes; (4) Learning and development opportunities [60]. Based on the description, it describes how the mechanism of the work environment directly or through the contribution of job stress determines the achievement of employee performance. Job stress can play an important role in the process of achieving optimal employee performance. However, there are still limited researchers who examine the role of job stress as a mediator in this context.

Proposition 1. Work Environment Creates Employee Performance.

Proposition 2. Work Environment Creates Employee Performance through Job Stress.

C. Creating Employee Performance through Job Stress
Job stress is a dynamic condition in which an individual faces opportunities, constraints, or demands, which are related to what he really wants and whose outcomes are perceived as uncertain but important [48]. Meanwhile, stress is a condition of tension that affects a person's emotions, thoughts, and physical condition [26], [61]. Stress that cannot be handled properly usually results in a person's inability to interact with his or her environment, both at work and outside of work [62]. In addition, [63] suggests work stress as a tension or pressure experienced when the demands faced exceed the strengths that exist in us. Based on this understanding of work stress, the researcher concludes that job stress is a dynamic condition of individuals in facing opportunities, constraints, or demands, which are related to what is highly desired and the results are perceived as uncertain but important.

[48] describes aspects of job stress including three general categories, namely; (1) Physiological symptoms, that stress can create changes in metabolism, increase heart rate, respiration, cause headaches, and heart attacks; (2) Psychological symptoms, that work-related stress can cause job dissatisfaction; (3) Behavioral symptoms, including changes in living habits, anxiety, smoking, excessive appetite, and sleep disturbances. According to [48] there are 3 factors that cause work stress, namely:

1. Environmental factors. Several factors that support environmental factors, namely: (a) Economic uncertainty A person who experiences a declining economic situation will become increasingly anxious about his or her welfare; (b) Political Uncertainty. Uncertain political conditions will result in the emergence of stress in a person; (c) Technological Uncertainty. Advances in technology can help employee performance, but the use of technology that is less or not optimal can hinder employee skills and experience.

2. Organizational factors. There are factors that can cause work stress in an organization, namely: (a) Task demands. Task demands include employee job design such as autonomy, task diversity, and level of automation, then working conditions, and physical layout. The more the tasks of an employee are interdependent with the duties of other employees, the more the potential for job stress. Physical conditions such as temperature, noise, or hazardous and unwanted working conditions can also cause anxiety, which can lead to stress; (b) Role demands. Role demands are demands given to an employee in carrying out his work. An employee must understand his role and duties in a company. If an employee does not know what his roles and responsibilities are in the company, the employee will experience confusion and uncertainty about what he should do. (c) Personal claims. Personal demands are job stress related to the pressure created by other employees. Lack of social support from other employees and the establishment of poor relationships between employees can be one of the causes of stress, especially for employees who have high social needs; (d) Organizational Structure. Unclear or excessive work rules and lack of participation in decision making can cause work stress; (e) Organizational Leadership. The leadership style of superiors who are not good, such as an authoritarian leadership style can cause work stress.

3. Individual Factors. Individual factors include: (a) Family. Relationships between family members that are not harmonious such as relationships with husband / wife and disharmony relationships with children can cause work stress; (b) Economics. The low level of a person's economy and or a person's inability to manage his finances can be the cause of work stress; (c) Personality. Stress can also occur as a result of how a person's personality responds to and accepts changes or demands from his job.

[64] revealed that stress has a positive impact and a negative impact. The defense reaction that causes stress has an impact on parts of the body this response indicates and adapts to the cause of the stressor by going through three different phases the first is called a signal (alarm) this is normal level of a person's resilience, the second phase is resistance where a person experiences fatigue, fear and tension where the level of resilience rises. above normal, and the third phase, fatigue, decline in health resulting in changes in immune system function. The process is gradual and will result in dangerous conditions. The research conducted by [63] explains that there is a negative relationship between job stress and work performance and a positive relationship between job stress and turnover intention. [65] shows that there is a very strong or positive significant effect between work stress on employee performance. Job Demand Resources theory developed by [13] states that work demands and resources are two major factors that determine the achievement of organizational outcomes. Work demands are negatively related to resources, namely high resources can reduce work
demands. High work demands can increase stress, whereas high resources can reduce stress. High stress can reduce employee performance, otherwise low stress can increase employee performance. Based on the theory and empirical that has been described earlier, the measurement of the job stress variable in this paper uses the parameters proposed by [45] by using indicators, including: (1) Feeling in a hurry; (2) Physical pain; (3) Anxiety; (4) Confusion; (5) The load on the shoulders; (6) Difficult to control emotions.

IV. Conclusion
This study prioritizes the role of job stress as a mediating variable in the effect of workload and work environment on employee performance, which has never been done by previous research. Based on the literature review, job stress has great potential in determining the achievement of employee performance which is driven by workload and work environment. Explanation of research variables through the perspective of Job Demand Resources (JDR), and Conservation of Resources (COR). The use of theory in this research is intended to provide a comprehensive explanation, although some theories have not been widely used by many studies. However, these theories are able to explain the effects that arise between variables significantly. The research model and supporting arguments used in this study can contribute to advancing current discussion efforts in the field of human resource management and business in general. Therefore, this research is very relevant to be applied to further studies using quantitative, qualitative, and mixed methods.

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