



## Mental Workload Affected Job Performance via Work Stress at Employees of Samarinda Probation Center

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### Abstract

Work execution can be affected by various mental disarrangements shown via work push caused by representatives encountering intemperate mental workloads. This reason can be considered a research objective, especially to study how mental workloads affect job performance through work stress in Samarinda Probation Center employees. This research used a census of all representatives, or forty employees, at the Samarinda Probation Center. SmartPLS 4 was used to conduct structural equation modelling with a partial least squares technique to examine the data obtained from the scale. Based on the findings, it was determined that mental workload positively and significantly affected work stress, that mental workload positively and significantly affected job performance, that work stress positively and significantly affected job performance, and that mental workload positively and significantly affected job performance via work stress.

**Keywords** *Mental Workload, Work Stress, Job Performance*

### INTRODUCTION

The Indonesian state, which adheres to Pancasila philosophy, views the purpose of punishment as an effort to rehabilitate and reintegrate prisoners into society rather than merely deterrence. This perspective was formed by the country's correctional system, which is used to deal with lawbreakers (Waluyo, 2018). The criminal justice system is presented as a framework that helps lawbreakers follow the right path and attain justice so that correctional inmates can be socially reintegrated into society through correctional management.

The fundamental tenet of correctional management is the arrangement, planning, control, and management of various resources to achieve corrective goals through the provision of information and analysis to senior correctional leaders, enabling them to manage staff better and oversee offices (McGuckin et al., 2017). Samarinda Probation Center, 22 Mas Tirtodarmo Haryono Street, Air Putih Subdistrict, Samarinda Ulu District, Samarinda City, is one of the technical implementation units under the auspices of the Directorate of Correctional Services of the Ministry of Law and Human Rights. It performs tasks and functions in the service industry, such as guidance, supervision, mentoring, and correctional research (Suwardani, 2019). The Samarinda Probation Center Office employs forty people, and its service area spans two towns and seven districts located in East Borneo. In 2023, there will be roughly 3,875 reports regarding correctional research requests from all technical implementation units.

Besides conducting correctional research, the Samarinda Probation Center is also expected to guide probation clients who are undergoing a social reintegration program. Samarinda Probation Center offers its probation clients character and independence therapy, an essential component of the criminal justice system's corrections concept, even during the pre-trial, trial, and post-trial phases. Thus, in this instance, each Samarinda Probation Center employee's performance

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is crucial to reuniting each probation client institution's life, lives, and livelihoods ([Paramarta, 2014](#)).

As a result of a focus group discussion conducted by the analysts with four employees members of the Samarinda Probation Center on Thursday, November 2, 2023, several things can be concluded, e.g. the existence of several other problematic jobs such as guidance, supervision, and mentoring that are sometimes impossible to perform is carried out optimally because the need for correctional research is so great that it often causes stress for employees when performing work due to the heavy workload that makes employees tired, and can even affect their health on their performance and even their psychological state. Thus, the motivation to work is too mentally exhausting, translating into a mental workload for each employee.

According to the explanation given above, it appears that mental illnesses of all kinds can affect an employee's ability to execute their job, which can lead to their perception of mental exhaustion and thus manifest as work-related stress. Consequently, this view is supported by an empirical study, which is presented in the following manner. Studies by [Banyi et al. \(2021\)](#), [Daniel \(2019\)](#), [Ehsan \(2019\)](#), and [Murali et al. \(2017\)](#) demonstrate that job performance is positively and significantly affected by workplace stress. Furthermore, studies conducted by [Jalagat \(2017\)](#) demonstrate a positive and significant association between job performance and work stress.

According to research by [Alsuraykh et al. \(2019\)](#) and [Kokoroko and Sanda \(2019\)](#), mental workload positively and significantly affects work stress. Furthermore, studies conducted by [Fachruddin et al. \(2019\)](#), [Tahrirah \(2019\)](#) and [Trisminingsih \(2019\)](#) demonstrate a positive and substantial correlation between mental workload and work stress. According to studies by [Azemil \(2017\)](#), [Siswanto et al. \(2019\)](#), and [Situmorang and Hidayat \(2019\)](#), mental workload not only affects work stress but also has a positive and significant effect on employees' job performance. However, studies by [Akca and Küçükoğlu \(2020\)](#) and [Omaloyo and Omole \(2013\)](#) demonstrate that there is no relationship between mental workload and job performance. This leaves a gap in the research as a result.

Based on the arrangement of issues portrayed and a few empirical things about over, as well as the phenomena and research gaps among the employees of the Samarinda Probation Center, the author would like to conduct a study titled topic "Mental Workload Affected Job Performance via Work stress at employees of Samarinda Probation Center".

## **LITERATURE REVIEW**

### **Mental Work Load**

Mental workload may be a sort of workload that emerges from the distinction between the workload prerequisites of an assignment and the mental workload capabilities of a person in a propelled state. Several factors can affect mental workload, including physical factors (gender, body size, health status, age, nutritional status) and psychological factors (cognition, motivation, belief, satisfaction, and desire) ([Sugiono et al., 2018](#)). In the meantime, mental workload is any sort of psychological state in which the person tries to preserve his execution and which is related to the execution of the organization. There are six indicators to determine mental workload, namely, mental demands, physical demands, temporal demands, overall performance, effort, and frustration ([Hart, 2006](#)).

### **Work Stress**

Work stress could be an energetic state in which a person is confronted with openings, requests, or indeed assets approximately what they crave, with the result considered questionable but critical. Several factors can affect workplace stress, including environmental, organisational, and personal factors ([Robbins & Judge, 2017](#)). In the meantime, work stress is any mental clutter

that people encounter in association with their work. To determine work stress, there are four indicators, which are workplace affect, loose organization and conflict, personal demands and commitments, and work interference with free time (Frantz & Holmgren, 2019).

### **Job Performance**

Job performance depends on how well the organization judges the person to have performed the obligations laid out within the work depiction. Several factors can affect job performance, including task performance, citizenship, and anti-productivity factors (Robbins & Judge, 2017). In the meantime, job performance alludes to all shapes of personal behaviour and activities related to organizational objectives, and the comes about can even be critical in completely different areas of work, both conceptually and for all intents and purposes. There are three indicators to determine job performance, namely task performance, contextual performance, and counterproductive work behaviour (Koopmans et al., 2014).

### **Hypothesis**

Based on numerous diverse hypothetical classifications put forward already, the starting theory of this thought includes:

H1: Mental workload affected work stress at Samarinda Probation Center employees.

H2: Mental workload affected job performance at Samarinda Probation Center employees.

H3: Work stress affected job performance at Samarinda Probation Center employees.

H4: Mental workload affected job performance via work stress at Samarinda Probation Center employees.

### **RESEARCH METHOD**

This study could be an expressive ponder with a quantitative approach utilizing the illustrative study strategy. This inquiry about employment in a deductive-inductive framework is based on the hypothetical system, past inquiry about what comes about, and the researcher's viewpoint. At that point, the issue set is created to demonstrate or refute experimental field information. This investigation employs overviews to clarify the relationship between two or more inquiries about factors. This ponder portrays the affect of exogenous factors (mental workload) on endogenous factors (job performance) via directing factors (work stress). To gather information for the overview strategy, scales with questions were distributed to all Samarinda Probation Center representatives, as many as 40 respondents. The summary suggests collecting information from a small number of respondents who are seen as representatives of the general employee. This questionnaire also includes a cross-sectional questionnaire that was completed over a specific time frame. The questions are distributed on paper. These inquiries are distributed with ease and tailored to each respondent. An item on the scale asks the respondent to select one of the available response options.

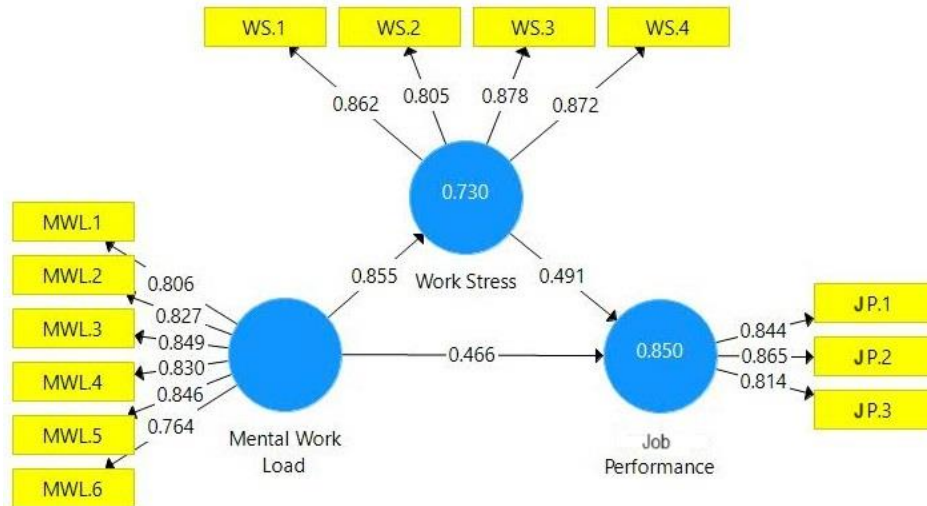
### **FINDINGS AND DISCUSSION**

#### **Finding**

Data analysis was done utilizing the SmartPLS 4 application. The following methods were used to conduct the research analysis.

#### *Outer model*

Outer model testing was utilized to survey the validity and reliability of inquiry about devices. The outer model test results include the following.

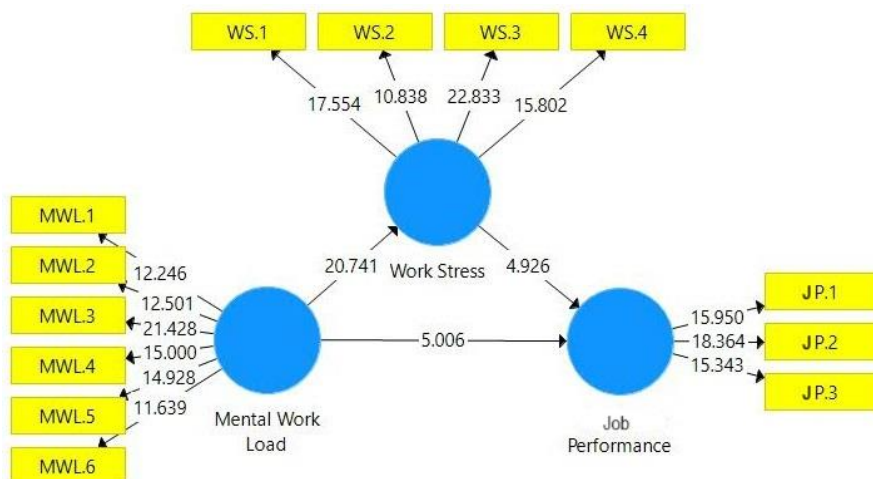


**Figure 1. Outer Model**

According to factor loading coefficients above 0.700, as can be shown in Figure 1, all indicators included in all variables have high values, meeting the criteria for convergent validity and suitability for testing the intended research hypothesis. Accordingly, work stress (Y1) will rise by 0.855 for every unit increase in mental workload (X). Moreover, job performance (Y2) is increased by 0.466 and 0.491, respectively, for every unit increase in mental workload (X) and work stress (Y1). According to the dependent variable work stress's R2 value of 0.730, 73% of work stress is affected by mental effort. In contrast, other factors not included in this study affected the remaining 27%. Therefore, the dependent variable for job performance has an R2 value of 0.850, indicating that mental workload and work stress account for 85% of job performance. In contrast, other factors not included in this study affect the remaining 15%.

*Inner Model*

The hypothesis is tested using the inner model. The outcomes of the inner model test comprise:



**Figure 2. Inner Model**

As seen in Figure 2, the coefficient is derived from 3 (three) direct affected lines and 1 (one)

indirect affected line that was examined using the Smartpls 4 program. These lines include:

1. Test the first hypothesis (H1), namely that mental workload (X1) has a positive and significant effect on work stress (Y1). The coefficient value of the total effect of mental workload on work stress is positive, expressed as a value of 0.855, meaning that the relationship between mental workload and work stress is positive. Then, the t value is calculated as  $20741 > 1691$  with a 5% significance level and df value = 36, meaning it is significant and has a positive relationship. In addition, the value of the t-count is larger than the t-table, so hypothesis H1 is considered correct and accepted, meaning that mental workload can affect work stress.
2. Test the second hypothesis (H2), namely that mental workload (X1) has a positive and significant effect on job performance (Y2). The coefficient value of the total effect of mental workload on job performance is positive, expressed as a value of 0.466, which means that the relationship between mental workload and job performance is positive. Then, the t value is calculated as  $5006 > 1691$  with a 5% significance level and df value = 36, meaning it is significant and has a positive relationship. In addition, the value of the T account is larger than the T table, so hypothesis H2 is considered correct and accepted, meaning that mental workload can affect job performance.
3. Test the third hypothesis (H3), namely that work stress (Y1) has a positive and significant effect on job performance (Y2). The coefficient value of the total effect of work stress on job performance is positive, expressed as a value of 0.491, which means that the relationship between work stress and job performance is positive. Then, the t value is calculated as  $4926 > 1691$  with a 5% significance level and df value = 36, meaning it is significant and has a positive relationship. In addition, the value of t is greater than the t table, so hypothesis H3 is considered correct and accepted, which means work stress can affect job performance.
4. Test the fourth hypothesis (H4), namely that mental workload (X1) has a positive and significant effect on job performance (Y2) via work stress (Y1). The coefficient value of the total effect of mental workload on job performance via work stress is positive, expressed as a value of 0.420, which means that the relationship between mental workload and job performance via work stress is positive. Then, the t value is calculated as  $4948 > 1691$  with a 5% significance level and df value = 36, meaning it is significant and has a positive relationship. In addition, the value of the T account is larger than the T table, so hypothesis H4 is considered correct and accepted, meaning that mental workload can affect job performance via stress in the workplace.

## Discussion

Discussion on the relationship between these factors can take several forms, depending on the results of research and testing hypotheses about the significance of each variable, as well as the speculative premise and available empirical evidence.

### *Mental workload affected work stress*

Tasks like decision-making and multitasking were major contributors to this stress. Employees felt overwhelmed when handling multiple tasks and making critical decisions under pressure. A high mental workload was associated with burnout symptoms like exhaustion and reduced efficacy. This highlights the importance of addressing mental workload to enhance employees' well-being and job performance. The study suggested strategies like training, resource provision, improved communication, and work-life balance promotion to manage mental workload. Organizations can help employees manage work stress and enhance job satisfaction by tackling high mental workload effectively (Alsuraykh et al., 2019; Tahrirah, 2019; Trisminingsih, 2019).

#### *Mental workload affects job performance*

Employees facing this issue were prone to errors, lack of focus, increased stress, and burnout. They struggled with meeting deadlines, effective communication, and decision-making. Consequently, overall job satisfaction decreased. To tackle this, the study suggested managing mental workload through training, resources for workload management, flexible schedules, and promoting work-life balance. Addressing mental workload can enhance job performance and well-being (Azemil, 2017; Siswanto et al., 2019; Situmorang & Hidayat, 2019).

#### *Work stress affects job performance*

They felt overwhelmed and burnt out due to high workloads, tight deadlines, and lack of management support. This stress also affected their concentration, decision-making, and communication with colleagues and clients—some experienced physical symptoms like headaches, insomnia, and digestive issues. Management has taken steps to address work stress, including stress management training, flexible schedules, and promoting open communication. By supporting employee well-being, the center aims to enhance job performance and create a healthier work environment (Murali et al., 2017; Ehsan, 2019; Banyu et al., 2021).

#### *Mental workload affects job performance via work stress*

A high mental workload can increase stress levels, affecting performance. Firstly, it can cause cognitive overload, hindering concentration and task focus, reducing productivity and efficiency. Moreover, it can lead to emotional exhaustion, overwhelming employees, reducing motivation and engagement, and affecting job satisfaction and performance. Additionally, work stress from a high mental workload can harm physical health, causing fatigue, headaches, and muscle tension, further slowing job performance. To improve performance, the center must manage mental workload by implementing strategies like workload management, providing support, and promoting work-life balance.

## **CONCLUSIONS**

### **Conclusion**

This research specifically examines how mental workload directly nor indirectly affects work stress and job performance at Samarinda Probation Center. First, work stress is affected by mental workload positively and significantly. Second, job performance is affected by mental workload positively and significantly. Third, job performance is affected by work stress positively and significantly. Fourth, job performance is affected by mental workload via work stress positively and significantly.

### **Further Research**

Based on the research results that have been obtained, limitations in terms of the level of generalization exist in this research through its small sample size due to the limited population size, so it uses census techniques. Further research can be carried out by expanding the research sample to Probation Centers throughout Indonesia to see whether these results can be widely applied. In addition, future research can also examine other factors that can affect the relationship between mental workload, work stress, and job performance, such as social support, work environment, and other personal factors. In addition, future studies should look into how stress management plans or other interventions affect the connection between mental strain, workplace stress, and job performance in probation centers. Thus, in high-mental-load work contexts, the research findings can enhance job performance and aid in the development of stress management techniques.

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