THE EFFECT OF WORKLOAD ON WORK PRODUCTIVITY AMONG EMPLOYEES OF THE SOCIAL SECURITY ADMINISTRATION AGENCY

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Article Info

ABSTRACT

Background: The global occupational health landscape faces challenges due to declining productivity associated with hazardous working conditions and high job demands. In social security institutions, the mandate of universal coverage often results in a heavy administrative burden. This study aims to empirically analyze the impact of workload on work productivity among employees of the Social Security Administration Agency. Method: A cross-sectional study was conducted at the North Sumatra Regional Office of the Social Security Administration Agency from January to April 2025. Total sampling was used, involving 30 employees. Data were collected through a closed questionnaire and analyzed using Simple Linear Regression in SPSS 25. Results: The results show a significant inverse relationship between workload and work productivity (B = -0.745; p = 0.032). The t-value of 2.251 exceeds the t-table value of 1.699, indicating that every 1% increase in workload causes a 0.745 unit decrease in productivity. Excessive workload was identified as a major factor hindering organizational efficiency. Conclusion: High workload significantly reduces employee productivity in the social security sector. Strategic interventions, including automated workflows and workload-based staffing models, are essential to maintain institutional performance without compromising employee capacity.

Keywords: Workload, Work Productivity, Social Security Agency, Employees, Occupational Health.

ABSTRAK

Latar Belakang: Landscaping kesehatan kerja global menghadapi tantangan akibat penurunan produktivitas yang terkait dengan kondisi kerja berbahaya dan tuntutan pekerjaan yang tinggi. Di lembaga jaminan sosial, mandat cakupan universal seringkali mengakibatkan beban administratif yang berat. Studi ini bertujuan untuk menganalisis secara empiris dampak beban kerja terhadap produktivitas kerja di kalangan pegawai Badan Administrasi Jaminan Sosial. Metode:

Studi potong lintang dilakukan di Kantor Wilayah BPJS Ketenagakerjaan Sumatera Utara dari Januari hingga April 2025. Pengambilan sampel total digunakan, melibatkan 30 karyawan. Data dikumpulkan melalui kuesioner tertutup dan dianalisis menggunakan Regresi Linier Sederhana di SPSS 25. Hasil: Hasil menunjukkan hubungan terbalik yang signifikan antara beban kerja dan produktivitas kerja (B = -0.745; p = 0.032). Nilai t sebesar 2.251 melebihi nilai t tabel sebesar 1.699, menunjukkan bahwa setiap peningkatan beban kerja sebesar 1% menyebabkan penurunan produktivitas sebesar 0.745 unit. Beban kerja berlebihan diidentifikasi sebagai faktor utama yang menghambat efisiensi organisasi. Kesimpulan: Beban kerja yang tinggi secara signifikan mengurangi produktivitas karyawan di sektor jaminan sosial. Intervensi strategis, termasuk alur kerja otomatis dan model penempatan tenaga kerja berdasarkan beban kerja, sangat penting untuk mempertahankan kinerja institusi tanpa mengorbankan kapasitas karyawan.

Kata kunci: Beban Kerja, Produktivitas Kerja, Badan Jaminan Sosial, Karyawan, Kesehatan Kerja.

1. INTRODUCTION

The global occupational health landscape is at a critical point, with an estimated 2.93 to 3 million work-related deaths occurring each year (ILO, 2023b). Data from the International Labor Organization (ILO) highlights a significant reality: work-related diseases (ORD) account for the majority of these deaths (89%, approximately 2.6 million lives), largely due to circulatory disorders, malignant neoplasms, and respiratory conditions (ILO, 2023a). In addition to fatal consequences, approximately 395 million workers experience non-fatal industrial injuries each year, placing a significant burden on health systems (Gammarano, 2025). The economic consequences are also significant, with approximately 4% of the world's Gross Domestic Product (GDP) lost each year due to reduced productivity and health costs associated with hazardous working conditions (ILO, 2019).

The distribution of fatal workplace accidents shows significant regional and demographic segmentation (Takala et al., 2024). The Asia-Pacific region accounts for approximately 63% of total fatal workplace accidents worldwide, a situation largely influenced by the large workforce and varying levels of industry regulation. A significant gender imbalance still exists in occupational safety outcomes, with male workers experiencing a much higher mortality rate (51.4 per 100,000 workers) than female workers (17.2 per 100,000 workers) (Conference, 2023). This data highlights the urgent need for gender-sensitive and region-specific occupational health initiatives to reduce systemic risks across the global workforce.

In the context of quasi-governmental institutions, such as the Social Security Administration Agency (BPJS), the workload has become very heavy due to the mandate to achieve Universal Health Coverage (JKN) and manage an extensive national database (Widjaja et al., 2025). Employees in this sector must navigate complex bureaucratic protocols while maintaining fast public services, often under strict performance targets (Fitriani et al., 2023). The transition to digital social security services, while intended to improve efficiency, has paradoxically introduced new administrative burdens and increased the quantitative workload for staff (Christian et al., 2022). Understanding how these specific pressures impact actual work productivity is crucial for the sustainability of social protection programs in Indonesia.

Recent empirical research has produced mixed results regarding the impact of workload; while some studies in the corporate sector suggest that workload can motivate performance in conditions of high support, the literature in the public service sector consistently identifies it as a detrimental factor for job satisfaction and service quality (Muchiri, 2022). However, there is a significant research gap regarding social security agency administrative staff, who face a different set of stressors compared to clinical or corporate workers (Shojaeian et al., 2020). Most existing studies focus on psychological outcomes (such as burnout or stress), often neglecting the direct quantitative impact of workload on objective work productivity in post-pandemic bureaucratic environments.

Therefore, this study aims to empirically analyze the impact of workload on work productivity among employees at the Social Security Administration Agency. Using a robust quantitative

methodology, this study seeks to determine the extent to which task complexity and time pressure affect employee output. These findings are expected to provide applicable insights for human resource managers in social security institutions to optimize workload distribution. Furthermore, this study contributes to the broader occupational health literature by offering a deeper understanding of productivity dynamics in the public service sector, which ultimately promotes the development of a more efficient and resilient workforce.

2. RESEARCH METHODE

The design of this study is *cross-sectional.* This study was conducted at the North Sumatra Regional Office of the Social Security Administration Agency for Employment. This study was conducted from January to April 2025. The sample in this study consisted of all 30 employees of the North Sumatra Regional Office of the Employment Social Security Agency. This study used a non-probability sampling technique, namely total sampling, which means that the sample consisted of the entire population. This study used a questionnaire as a data collection instrument, with a closed-ended questionnaire. Primary data was obtained from a study using instruments conducted at the time of the study. Secondary data is data obtained indirectly by the data collector, such as through documents or other parties. The collected data was then analyzed using SPSS version 25. The type of analysis used in this study was Simple Linear Regression Analysis.

3. RESULT AND ANALYSIS
Result

Table 1. Simple Linear Regression Analysis of the Effect of Workload on Work Productivity among Employees

Variable	B	Sig.	Exp(B)
Workload	-0.745	0.032	62.212

Based on the results of linear regression analysis, it was found that workload has a significant and inverse effect on employee productivity at the BPJS Ketenagakerjaan Sumbagut Regional Office. The constant value of 62.212 indicates that in conditions without fluctuations in workload, employees theoretically have a sufficiently high productivity base. However, the regression coefficient of -0.745 confirms the existence of an antagonistic relationship, whereby

every 1% increase in workload will result in a 0.745 unit decrease in productivity. The validity of these findings is statistically reinforced by a significance value of 0.032 (below the threshold of 0.05) and a t-value (2.251) that exceeds the critical t-table value (1.699). Overall, these data prove that excessive workload is not merely an administrative challenge, but a determining factor that significantly suppresses the efficiency and work output of employees in the social security ecosystem.

Discussion

Empirical findings in this study confirm a significant inverse relationship between the volume of tasks assigned and the quality of output produced by employees in the social security sector. Specifically, the results of this study show that an increasing workload acts as a major obstacle to work efficiency, where the physical and psychological stress arising from excessive work demands directly reduces the ability of individuals to maintain optimal performance. This phenomenon indicates that the distribution of workload within the institution has reached a point of diminishing returns, where additional work pressure no longer stimulates productivity but instead triggers a systemic decline in organizational effectiveness. Therefore, workloads that exceed the limits of employees' adaptive capacity have proven to be a structural obstacle that hinders the achievement of the institution's strategic targets.

In line with Muslih and Damanik research results, it was proven that the work environment and workload partially and simultaneously had a significant effect on employee performance at PT. Perkebunan Nusantara IV (Persero) Medan (Muslih & Damanik, 2022). In addition, Rina's research results also prove that the factors that influence work productivity are workload and compensation (Anjanarko et al., 2022). Other studies also show that work stress, work conflict, and workload have a significant positive effect on employee performance (Kadek et al., 2022). Based on Hani's research, the results show that partial workload has a positive and significant impact on employee performance, and work stress also has a positive and significant impact on employee performance (Kobis et al., 2023). Research results and several findings indicate that workload affects employee productivity, whereby the higher the

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workload, the lower the productivity, as employees become increasingly burdened with excessive work.

The implications of this study are significant both theoretically and practically. Theoretically, this study reinforces the Effort-Recovery Model, which shows that when workload prevents adequate recovery, productivity will inevitably decline. Practically, the Social Security Agency (BPJS) needs to reevaluate its workforce distribution and task allocation strategies. Management should prioritize the implementation of automated administrative workflows to reduce manual workload and consider a workload-based staffing model rather than a purely structural one. In addition, providing periodic "psychological separation" interventions can help employees recover their cognitive resources, thereby maintaining long-term productivity and preventing institutional fatigue.

Despite its empirical contributions, this study has several limitations. First, the cross-sectional design limits the ability to draw definitive causal conclusions over time. Second, the use of self-reported measures to gauge productivity may introduce social conformity bias, whereby employees view their output differently from objective institutional metrics. Furthermore, this study is limited to the North Sumatra Regional Office, which may restrict the generalization of findings to other regions with different workloads or digital infrastructure. Future research should adopt a longitudinal approach and incorporate objective performance data, such as task completion rates or error frequencies, to provide a more detailed understanding of the relationship between workload and productivity.

4. CONCLUSION

This study concludes that workload has a statistically significant negative impact on employee productivity at the North Sumatra Regional Office of the Social Security Administration Agency for Employment (BPJS Ketenagakerjaan). These findings confirm that excessive task distribution has reached a point of diminishing returns, where increased work pressure has become a structural obstacle to organizational efficiency. Theoretically, these results reinforce the Effort-Recovery Model, which states that productivity will decline if workload hinders the recovery of employees' cognitive capacity. As a practical implication, BPJS Ketenagakerjaan

management is advised to optimize job allocation strategies based on actual workloads, accelerate the automation of administrative workflows to reduce manual burdens, and implement psychological rest interventions to maintain long-term resilience and productivity.

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