

The Relationship Between Workload and Employee Work Productivity at PT Semesta Berkat Utama

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Article Information	ABSTRACT
Article History Received : December 21, 2025 Revised : January 08 2026 Published : January 20, 2026	Employee productivity is a critical factor for organizational success in an increasingly competitive industrial environment. Workload is often perceived as a determinant that can influence productivity, with effects varying depending on individual adaptability and management support. This study aims to analyze the relationship between workload and employee productivity at PT Semesta Berkat Utama. A quantitative correlational approach with a cross-sectional design was applied, involving all 10 employees selected using a saturated sampling technique. Data were collected through closed questionnaires using a 5-point Likert scale and analyzed using Spearman rank correlation due to non-normal data distribution. The results show a very strong positive correlation between workload and productivity ($r = 0.967$, $p = 0.000 < 0.05$), indicating that higher workload is associated with higher productivity in this context. The coefficient of determination ($r^2 = 0.991$) suggests that workload explains 99.1% of productivity variance. These findings imply that high workload can act as a performance driver when supported by strong motivation and work commitment. The study provides practical insight for proportional workload management to sustain optimal productivity.
Keywords: <i>Workload;</i> <i>Work productivity;</i> <i>Employee performance;</i> <i>Spearman correlation;</i> <i>Industrial sector.</i>	

INTRODUCTION

In a time of worldwide interconnectedness and rising industrial rivalry, businesses must ensure they operate at their best to endure and flourish. Human resources serve as a vital resource for organizations since they significantly contribute to reaching company objectives, and the caliber of the employees is essential in influencing a business's success. (Tobamba et al., 2023). Therefore, companies need to ensure that employees work effectively and efficiently to make maximum contributions. A company's success is greatly influenced by the ability of employees to optimally carry out their tasks, as the quality of employee performance is a crucial factor driving the achievement of organizational goals (Habiburrahman and Zhavira in Marlina et al., 2024). Employee productivity is a key indicator of successful human resource management, as an uneven workload can create tension and reduce productivity if not supported by adequate facilities and a work environment (Ilmi et al., 2024).

The dynamic relationship between workload and productivity is also inseparable from individual work abilities, where each worker has different abilities depending on various factors such as skill level, age, and physical characteristics such as body size and fitness (Trisnawaty & Parwoto, 2020). Furthermore, excessive workloads can lead to physical and psychological fatigue in workers, which can make employees unproductive in their work due to overexertion (Saefullah, et al., 2017).

Essentially, work productivity implies a workforce's attitude and belief that their work today must be better than yesterday's, and that tomorrow's results must be better than today's (Bate'e, 2020). Employees can be considered productive in their work if they are able to produce results in accordance with targets, especially those usually set by the company, and are able to take responsibility for completing their tasks according to the deadline (Baiti, et al., 2020).

To understand its role further, productivity is also the main benchmark for performance success. According to Budi (2022), The higher the productivity, the better the performance of individuals and organizations. Productivity reflects the effectiveness and efficiency of individuals in carrying out tasks, to the point that its increase becomes an important indicator of organizational success. In this context, productivity can be defined as an individual's ability to produce products or services by utilizing resources efficiently, both in terms of quality and quantity (Ariani et al., 2020). One of the main challenges in efforts to increase productivity is the workload faced by employees. Workload is understood as a number of tasks or tasks that must be completed within a certain time limit, according to the individual's abilities and skills (Munandar in Abang et al., 2018). A mismatch between workload and employee capacity can cause physical and psychological stress, such as fatigue, stress, and decreased motivation, which ultimately negatively impacts productivity (Nabawi, 2019). However, in some settings, increased workload can motivate workers to strive harder and increase productivity when managed well.

Various previous studies have shown varying findings regarding the relationship between workload and productivity. Fathoni (2020) and Fausiah et al. (2023) found that workload can increase productivity if managed effectively. Research by Afiqah et al. (2024) indicates a significant relationship between workload and productivity, with moderate workloads associated with optimal productivity. However, excessive workloads tend to decrease productivity by causing fatigue and stress. These results align with research by Asih et al. (2022), which found that excessive workloads negatively impact work productivity.

PT Semesta Berkas Utama, a provider of refrigeration services, products, and spare parts, faces similar challenges. A limited workforce forces some employees to handle additional tasks beyond their job descriptions. Initial observations indicate that despite a set eight-hour workday, many employees still struggle to meet targets and often work longer hours. This creates feelings of overwhelm, potentially reducing the quality and quantity of work. Hermawan (2022) added that companies with limited manpower are at greater risk of experiencing high workloads due to unbalanced task distribution, which can ultimately impact employee productivity. Based on this description, this study aims to determine the relationship between workload and employee productivity at PT Semesta Berkas Utama. The research findings are anticipated to provide practical input for effective workload management to achieve optimal productivity.

RESEARCH METHODS

This research method uses a quantitative approach with a correlational design to determine the relationship between workload and employee productivity at PT Semesta Berkas Utama. The research was conducted using a quantitative approach *cross-sectional*, until data collection was conducted at a specific point in time. The study population consisted of all 10 employees of PT Semesta Berkas Utama. The relatively small population size meant that all employees were sampled using a saturated sampling technique.

Problem identification is the first step in the research process, which involves initial observations in the company. This is followed by a literature review to strengthen the theoretical framework, formulate research objectives, and develop instruments. The data collection process involves the use of closed-ended questionnaires structured on a Likert scale. The existing instruments consist of two main questionnaires. First, a workload questionnaire adapted from Hudson & Shen (2018) with five statements regarding work-related cognitive demands. Second, a work productivity questionnaire adapted from Mitchel et al., (2018) with four statements focusing on the performance pressure dimension. All statements use a Likert scale with five answer options, namely from 1 (Strongly Disagree) to 5 (Strongly Agree).

Before their application, the measuring tools in the research were subjected to tests for validity and reliability. The outcomes of these tests showed that every statement item was valid and satisfied the necessary criteria, thus permitting the use of the instrument in this research. The collected data were subsequently analyzed through a correlation test known as Spearman to assess the connection between workload and work productivity. This method was chosen due to the findings from the assumption test, which revealed that the data did not follow a normal distribution. The analysis was carried out using statistical software to achieve results that were more precise and reliable.

Given the relatively small population size of 10 employees, a saturated sampling technique was chosen to ensure all members of the population were represented in the analysis. However, the limited sample size has the potential to impact the stability of statistical values, particularly the resulting correlation coefficients. Therefore, the analysis results in this study are intended to illustrate the relationships between variables only within the specific context of PT Semesta Berkas Utama and are not intended for broader generalization. Furthermore, the correlational approach used in this study only identifies statistical relationships between variables and does not allow for causal conclusions.

RESULTS AND DISCUSSION

This section presents the results of research on the relationship between workload and employee productivity at PT Semesta Berkas Utama. The analysis was conducted to determine the extent to which the level of workload experienced by employees is related to their level of work productivity. Based on data collected from 10 respondents, all of whom are permanent employees, the general picture is that most employees experience high levels of workload and high levels of work productivity. The following table provides an overview of these two variables.

Table 1. Distribution of Respondent Categories Based on Workload and Work Productivity at PT Semesta Berkas Utama in 2024

Category	Workload (f)	Workload (%)	Work Productivity (f)	Work Productivity (%)
Very High	8	80	8	80
Very Low	2	20	2	20
Total	10	100	10	100

Considering the previous table, 8 respondents (80%) had a very high workload and very high work productivity. Meanwhile, 2 respondents (20%) were in the very low workload and very low work productivity category. This suggests a consistent pattern: high workloads are associated with high work productivity, while low workloads tend to be associated with low productivity.

Table 2. Correlation Test of Workload and Work Productivity at PT Semesta Berkas Utama in 2024

Variable	r	r ²	Sig.	Remark
Work Productivity – Workload	0.967	0.991	0.000	There is a relationship

The Spearman correlation analysis reveals a p-value of 0.000 ($p < 0.05$), leading to the acceptance of H1. This suggests a notable connection exists between the amount of work and how well employees perform at PT Semesta Berkas Utama. With a correlation coefficient R of about 0.967, this points to a relationship that is both positive and has a powerful degree of correlation. The determination coefficient (r^2) registers around 0.991, signifying that the volume of work

accounts for 99.1% of what affects employee productivity, while other factors not examined in this study account for the rest.

The results of this study indicate a significant positive correlation between workload and employee productivity at PT Semesta Berkas Utama. Although the analysis shows a very high correlation coefficient between workload and productivity, this finding should be interpreted with caution. The relatively small sample size ($n = 10$) allows for statistically inflated correlations, particularly when respondents' response patterns tend to be homogeneous. This can lead to the relationship between variables appearing very strong, although it does not fully reflect the more complex dynamics within the larger population.

Furthermore, the very high coefficient of determination ($r^2 = 0.991$) does not necessarily indicate that workload is the sole factor determining employee productivity. This result is more accurately understood as a statistical correlation within the context of this study, where other variables such as work motivation, organizational commitment, work culture, and work environment conditions were not included in the analysis model. Therefore, the contribution of workload to productivity in this study cannot be separated from the limitations of the research design and scope.

It should be emphasized that this study used a correlational approach with a cross-sectional design, so the relationships found cannot be interpreted as causal. The finding that higher workload is associated with higher productivity does not necessarily mean that increased workload directly causes increased productivity. The relationship merely reflects a statistical association at a specific measurement point in the context of PT Semesta Berkas Utama.

The results of the study show that the greater the workload, the higher the employee productivity, this also shows that workload is not only a source of stress but can also serve as a challenge that drives performance improvement. Conversely, Adityawarman (2015) suggests that workload can decrease employee performance if the workload continues to increase without appropriate workload distribution. This aligns with Manalu's (2020) statement, citing Komaruddin, that workload is one of the causes of employee performance issues.

More specifically, the research data shows that the majority of respondents with very high workloads (8 people) actually have very high levels of productivity. This result contrasts with general assumptions and some previous research, which states that excessive workloads tend to reduce performance effectiveness. This difference can be explained by internal factors such as motivation, commitment, and job satisfaction. In accordance with Munandar's theory (2011, cited in Abang et al., 2018), high workloads can have a positive impact if individuals are able to adapt to the pressure, to the point where workloads can actually be a driver of productivity. In addition to these factors, research by Saliyuana et al. (2024) also suggests that positive employee engagement can improve their performance. While high workloads can be a barrier, such engagement creates a positive work environment that can help increase employee productivity.

This finding aligns with research by Afiqah et al. (2024) at PT Multiagro Sumatera Jaya, which found a significant positive correlation between workload and work productivity ($p = 0.036 < 0.05$). Similar results were also obtained by Fathoni (2021) and Fausiah et al. (2023), who emphasized that workload has a positive impact when managed effectively. Ariani, Ratnasari, and Tanjung (2020) also emphasized that productivity is determined not only by output but also by how a company optimizes its human resources. By optimizing resources in the form of equal distribution of workload among the existing number of employees, work productivity will increase because employees work according to their capacity without any excess workload (Arifin, 2020).

However, the results of this study do not entirely align with other findings. Asih et al. (2022) reported a negative effect of workload on employee productivity. Similarly, Indriati & Khasanah (2023) found that workload has a significant negative effect on work productivity, with a workload coefficient of -0.413. A mounting workload, which requires employees to perform multiple tasks, will result in employees being less productive in the workplace. Research conducted by Trisnawaty & Parwoto (2020) also suggests that workload has a significant negative effect on

employee productivity. With a workload coefficient of -0.328, this indicates that a high workload will decrease work productivity. This study also revealed that decreased employee productivity is not only caused by workload but can also be triggered by a poor work environment, which negatively impacts employees' daily lives. A high workload combined with a poor work environment will hinder productivity, thus decreasing employee productivity. The results of this research also provide an indication that the impact of workload is contextual, influenced by company conditions, management systems, work environment, and employee adaptability.

This finding also addresses a gap in previous research that suggested an inconsistent relationship between workload and productivity. Thus, this study provides empirical evidence that, in the context of PT Semesta Berkas Utama, a high workload can actually boost productivity if supported by strong motivation and work commitment. This demonstrates that workload can be assessed not only by the number of tasks assigned to employees, but also by how employees interpret these job demands as part of their professional responsibilities. In other words, when employees perceive their workload positively, the resulting stress can transform into a trigger that increases focus, resilience, and work effectiveness, thus impacting work productivity.

In the context of PT Semesta Berkas Utama, workforce limitations force some employees to undertake additional tasks beyond their job descriptions (Hermawan, 2022). However, this situation actually encourages employees to work harder. Motivation and work mentality have also been shown to play a significant role in maintaining productivity (Fathoni, 2021). Therefore, this study demonstrates that a high workload does not always equate to decreased productivity; rather, under certain circumstances, it can be a catalyst for work enthusiasm and a means of positive adaptation that maintains and even increases employee productivity. This finding also indicates that employees' success in maintaining productivity is also influenced by their ability to manage stress and find effective problem-solving strategies, so that a high workload does not turn into a debilitating burden, but rather into something that can strengthen daily work performance.

CONCLUSION

This study indicates a strong positive correlation between workload and employee productivity at PT Semesta Berkas Utama. The higher the workload, the higher the productivity achieved. The majority of respondents with very high workloads also had very high productivity, meaning that workload, in this context, is not merely a source of stress but can also serve as a challenge that drives performance improvement. These findings confirm that the impact of workload is contextual. While some previous research has indicated a negative effect of workload on productivity, this study demonstrates that employee motivation, commitment, and adaptability play a crucial role in maintaining productivity despite high workloads.

Practically, companies are advised to manage workload by considering task distribution, motivational support, and employee psychological well-being to maintain optimal productivity. Theoretically, this study contributes to the understanding that workload can have both positive and negative impacts, depending on the organizational context and individual factors. Further research could expand the sample size with a larger number of respondents or include other variables, such as job stress, job satisfaction, and organizational support, to provide a more comprehensive picture of the variables that influence employee productivity. The limitations of this study include the fact that it was conducted in only one company, the use of a correlational design with a cross-sectional approach, and the measurement of variables based on respondents' perceptions. Furthermore, the variables analyzed were limited, so other factors potentially influencing work productivity were not fully accounted for. Therefore, the results of this study require careful interpretation in accordance with the scope and objectives of the study.

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