



Factors influencing work productivity among employees at the Aceh Provincial Health Office

Israknur¹, Johannes Bastira Ginting^{2*}, Santy Deasy Siregar²

ABSTRACT

Productivity is a critical measure of individual performance, particularly in the healthcare sector, where human resources play a pivotal role in achieving organisational and national development goals. This study examines the factors influencing work productivity among employees at the Aceh Provincial Health Office, focusing on education, motivation, discipline, work ethic, and work attitude. Using a descriptive quantitative approach with a cross-sectional design, data were collected from 100 employees through observation, interviews, and questionnaires. Univariate and bivariate analyses, including chi-square tests, were employed to assess the relationships between variables. The results indicate that 68% of employees demonstrated good work productivity. Motivation, discipline, work ethic, and work attitude showed statistically significant positive correlations with productivity ($p = 0.000$). Specifically, 95.2% of highly motivated employees exhibited good productivity, compared to only 25.2% of those with poor motivation. Similarly, 98.8% of disciplined employees and 81.5% of those with a strong work ethic demonstrated good productivity. A positive work attitude also correlated strongly with productivity (78.0% vs. 61.0% for negative attitudes). However, education level did not significantly influence productivity ($p = 0.391$), with 80% of highly educated and 66.7% of less educated employees showing good productivity. These findings highlight the importance of fostering motivation, discipline, work ethic, and positive work attitudes to enhance productivity in healthcare settings. While education level was not a significant factor, addressing the other variables can create a conducive work environment and improve service quality. This study underscores the need for organisations to prioritise these factors through incentives, recognition, and professional development opportunities to achieve optimal productivity and organisational success.

Keywords: work productivity, healthcare sector, employee motivation, work ethic

Introduction

Developing a productive human resource is pivotal to achieving national development objectives. Similarly, businesses, primarily established to generate profit for sustainability and growth, rely on this. To this end, companies strive to leverage all available capabilities and opportunities while mitigating challenges and weaknesses.¹ Productivity is a crucial indicator of individual performance. It reflects the ability to maximise the output of goods and services through the efficient utilisation of resources. Human resources, particularly healthcare workers in the healthcare sector, are paramount in enhancing productivity.^{2,3} Indonesia's national development goals aspire to the holistic development of its citizens, encompassing both material and spiritual well-being. The role of individuals in this development is substantial and cannot be

Affiliation

¹Undergraduate in Public Health Science, Universitas Prima Indonesia, Medan, Indonesia

²Department of Public Health, Universitas Prima Indonesia, Medan, Indonesia

*Correspondence:

johannesbastiraginting@unprimdn.ac.id

overlooked. People are expected to transition from being mere recipients of development to active contributors.^{4,5} To achieve this, human resource development and management are essential, aiming to cultivate productive and self-reliant individuals with enhanced capabilities.⁶

The workforce undeniably plays a critical role in a company's success. Human resources are fundamental to all organisational activities, even as industrial automation increases. Effective and efficient labour remains a crucial determinant of production processes. Consequently, organisations seek to optimise worker performance.^{7,8} Substandard workforce quality impedes development and production across sectors, as human resources are central to achieving organisational goals. For businesses aiming to expand, sustain operations, and generate profits, employee productivity is a key performance metric.⁹ Organisational success is reflected in the collective output of individual employees, which impacts overall productivity. Enhanced employee productivity is expected to improve employee welfare. Increased labour productivity benefits workers through higher wages, businesses through sustained operations, and governments through increased national income.¹⁰

Factors such as education, age, work experience, and remuneration influence labour productivity. To maintain optimal productivity, organisations must address these factors to enhance workforce performance and profitability.^{11,12} Observations and information from the Head of the Aceh Provincial Health Office highlighted issues with low work discipline. Discipline is a critical operational function of Human Resource Management, as enhanced discipline correlates with improved performance and accountability. Fostering a healthy work environment requires aligning employee rights and responsibilities with their functions, roles, and accountabilities. This research aims to analyse the factors influencing work productivity among employees at the Aceh Provincial Health Office.

Method

This research is a descriptive quantitative study with a cross-sectional design that aims to analyse the factors influencing employee work productivity at the Aceh Health Office. Data were collected through observation, interviews, and questionnaires administered to all employees. This research was conducted at the Aceh Provincial Health Office in December 2024. This research was conducted at the Aceh Provincial Health Office, targeting a population of 100 employees. Given the relatively small population size, a total sampling technique was employed, whereby all members of the population, i.e., 100 employees, constituted the research sample.

In this research, several variables were identified and measured to analyse their impact on work productivity. These variables included motivation, discipline, education, work ethic, and work attitude. Motivation was measured as the encouragement provided by superiors, with motivation levels categorised as either good (scores 11-20) or poor (scores 1-10). Discipline was defined as adherence to regulations, with discipline levels also categorised as either good (scores 11-20) or poor (scores 1-10). Education was measured as the level of educational attainment, categorised as either high (tertiary education) or low (secondary education). Work ethic was measured as the effort to develop a productive work ethic, with work ethic levels categorised as either good (scores 11-20) or poor (scores 1-10). Work attitude was measured as employee response to performance, categorised as either positive (scores 11-20) or negative (scores 1-10). Work productivity was measured as the effort to develop productive work, with work productivity levels categorised as either good (scores 11-20) or poor (scores 1-10). All variables were measured using questionnaires with an ordinal scale, and the evaluation criteria for each variable were good/poor, high/low, or positive/negative, according to the operational definitions of the respective variables.

This study employed two types of data analysis: univariate and bivariate. Univariate analysis was conducted to describe the characteristics of each research variable. The primary objective of this analysis was to elucidate the frequency and percentage distributions of each observed variable. Subsequently, bivariate analysis was performed to examine the relationships between independent and dependent variables. In this analysis, the chi-square test was utilised to assess the significance of the associations between variables. The decision criterion was based on the p-value. If the p-value exceeded 0.05 ($p > 0.05$), the null hypothesis (H_0) was accepted, indicating no significant relationship between the independent and dependent variables. Conversely, if the p-value was less than 0.05 ($p < 0.05$), the null hypothesis (H_0) was rejected, suggesting a significant relationship between these variables.

Results

Table 1 presents the frequency distribution across various variables, including gender, age, education, motivation, discipline, work ethic, work attitude, and work productivity. Overall, these data provide an overview of employee characteristics and performance. Regarding gender, there is a slight difference, with 55% of employees being female and 45% being male. In terms of age, the majority of employees (53%) are below 38 years old, while 47% are 39 years or older. Interestingly, the majority of employees (90%) have a low level of education, with only 10% being highly educated. This indicates a need for improved educational qualifications among the staff. In terms of factors influencing performance, the majority of employees demonstrate good motivation (63%), discipline (57%), and work ethic (65%). However, a positive work attitude is only shown by 41% of employees, with 59% exhibiting a negative attitude. Nevertheless, overall work productivity is quite good, with 68% of employees showing good productivity.

Table 1. Demographic and work-related characteristics of respondents

Variable	n	%
Gender		
Male	45	45
Female	55	55
Age		
< 38 years	53	53
> 39 years	47	47
Education		
Higher education	10	10
Lower education	90	90
Motivation		
Good	63	63
Poor	37	37
Discipline		
Good	57	57
Poor	43	43
Work ethic		
Good	65	65
Poor	35	35
Work attitude		
Positive	41	41
Negative	59	59
Work productivity		
Good	68	68
Poor	32	32

Table 2 presents an analysis of the relationship between education, motivation, discipline, work ethic, and work attitude with work productivity. Out of the 100 respondents studied, it was found that 10% had a high level of education, while the remaining 90% had a low level of education. In the group with a high level of education, 80% demonstrated good work productivity, and 20% demonstrated poor work productivity. Meanwhile, in the group with a low level of education, 66.7% demonstrated good work productivity, and 33.3% demonstrated poor work productivity. The statistical analysis yielded a p-value of 0.391, indicating that there is no statistically significant relationship between education level and work productivity.

In this study, 63% of respondents demonstrated a good level of motivation, while 37% demonstrated a poor level of motivation. In the group with good motivation, 95.2% demonstrated good work productivity, and 4.8% demonstrated poor work productivity. Conversely, in the group with poor motivation, only 25.2% demonstrated good work productivity, while 74.8% demonstrated poor work productivity. The p-value of 0.000 indicates a highly statistically significant relationship between motivation and work productivity, suggesting that good motivation is strongly correlated with good work productivity.

Out of the 100 respondents, 57% demonstrated a good level of discipline, while 43% demonstrated a poor level of discipline. In the group with good discipline, 98.8% demonstrated good work productivity, and 18.2% demonstrated poor work productivity. In the group with poor discipline, only 27.9% demonstrated good work productivity, while 72.1% demonstrated poor work productivity. The p-value of 0.000 indicates a highly statistically significant relationship between discipline and work productivity, suggesting that good discipline is strongly correlated with good work productivity.

In this study, 65% of respondents demonstrated a good work ethic, while 35% demonstrated a poor work ethic. In the group with a good work ethic, 81.5% demonstrated good work productivity, and 18.5% demonstrated poor work productivity. In the group with a poor work ethic, only 42.9% demonstrated good work productivity, while 57.1% demonstrated poor work productivity. The p-value of 0.000 indicates a highly statistically significant relationship between work ethic and work productivity, suggesting that a good work ethic is strongly correlated with good work productivity.

Table 2. Relationship between education, motivation, discipline, work ethic, and work attitude with work productivity

Variable	Work productivity						p
	Good		Poor		Total		
	n	%	n	%	n	%	
Education							
Higher education	8	80,0	2	20,0	10	100	0,391
Lower education	60	66,7	30	33,3	90	100	
Motivation							
Good	60	95,2	3	4,8	63	100	0,000
Poor	8	25,2	29	78,4	37	100	
Discipline							
Good	56	98,8	1	18,2	57	100	0,000
Poor	12	27,9	31	72,1	43	100	
Work ethic							
Good	53	81,5	12	18,5	65	100	0,000
Poor	15	42,9	20	57,1	35	100	
Work attitude							
Positive	32	78,0	9	22,0	41	100	0,000
Negative	36	61,0	23	39,0	59	100	

Out of the 100 respondents, 41% demonstrated a positive work attitude, while 59% demonstrated a negative work attitude. In the group with a positive work attitude, 78.0% demonstrated good work productivity, and 22.0% demonstrated poor work productivity. In the group with a negative work attitude, 61.0% demonstrated good work productivity, and 39.0% demonstrated poor work productivity. The p-value of 0.000 indicates a highly statistically significant relationship between work attitude and work productivity, suggesting that a positive work attitude is strongly correlated with good work productivity.

Discussion

In the operational context of healthcare services, the relationship between employee work motivation and performance at the Aceh Province Health Office plays a crucial role in determining organisational success. Work motivation, encompassing both internal and external drivers, significantly influences employee attitudes, commitment, and work behaviour. Highly motivated employees tend to exhibit improved productivity, enhanced service quality, strong commitment and loyalty, and initiative and innovation in their work. Positive motivation also contributes to a favourable work environment, reduced absenteeism and stress levels, and employee personal and career development. Consequently, the Aceh Province Health Office needs to cultivate a work environment that fosters employee motivation through the provision of incentives, recognition, career development opportunities, and a positive work atmosphere.

In addition to motivation, discipline is closely associated with work productivity. Disciplined employees tend to demonstrate effective time management, high work quality, efficient resource utilisation, and a strong work ethic and motivation. Conversely, indiscipline can lead to decreased productivity, delays, and task completion postponements.¹³ Work motivation encourages employees to feel enthusiastic about their tasks, leading to organizational growth.¹⁴ Studies show that both work discipline and motivation positively influence employee performance, with work ethic acting as a mediating factor.¹⁵

Work ethic, which encompasses attitudes, values, and principles such as discipline, responsibility, honesty, diligence, and professionalism, also plays a vital role in enhancing employee performance and healthcare service quality. Employees with a strong work ethic tend to deliver high-quality services, work efficiently, demonstrate responsibility, professionalism, and cooperativeness. A robust work ethic also strengthens employee trust and loyalty towards the organisation.^{16,17}

Work attitude, defined as the behavioural inclination towards work and the work environment, exerts a fundamental influence on work productivity. Positive mental attitudes and motivation, commitment to work, quality orientation, and effective teamwork all contribute to increased productivity. Therefore, organisations must prioritise the development of positive work attitudes as a long-term investment.^{18,19}

However, statistical analysis reveals that respondent education levels do not significantly affect work productivity at the Aceh Province Health Office. This finding diverges from previous research that indicated a positive correlation between education levels and work productivity. Consequently, further research is warranted to elucidate other factors that may influence work productivity at the Aceh Province Health Office, irrespective of employee education levels. Overall, motivation, discipline, work ethic, and work attitude are critical factors that influence employee work productivity at the Aceh Province Health Office. Organisations must focus on developing these factors to create a conducive work environment and enhance healthcare service quality.

Conclusion

Motivation, discipline, work ethic, and work attitude are critical determinants of work productivity, with each showing a statistically significant and positive correlation. In contrast, education level does not appear to play a significant role in influencing productivity in this study. These findings underscore the importance of fostering motivation, discipline, a strong work ethic, and a positive attitude in the workplace to enhance productivity.

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