Factors Related to Work Productivity Employees of Health Department in Maybrat Regency, West Papua Province

Melfia Sagrim\textsuperscript{a}, Sarce Makaba\textsuperscript{b*}, Dolfinus Y. Bouway\textsuperscript{c}, Martapina Anggai\textsuperscript{d}, Hasmi\textsuperscript{e}, Semuel Piter Irab\textsuperscript{f}

\textsuperscript{a}Postgraduate Master Program of Public Health, Faculty of Public Health, Cenderawasih University
\textsuperscript{b,c,d,e,f}Faculty of Public Health, Cenderawasih University, Jayapura Papua, Indonesia, 99351

\textsuperscript{a}Email: sagrimmelfia@gmail.com
\textsuperscript{b}Email: sarcemakaba22@gmail.com

Abstract

Background: Work productivity is very important to note in order to create discipline in good work management. Due to the many factors that can affect work productivity, it is necessary to pay attention to the factors that most influence work productivity for employees. Objectives: This study aims to determine the factors associated with work productivity. Methods: This type of research is analytic with a cross sectional study approach. This research was conducted in November 2022 at the Maybrat District Health Office. The sample in this study was Civil Servants of the Maybrat District Health Office with a total sample of 77 respondents. Data were analyzed using the chi-square test, at a significant level of 5%. Result: The results of the study showed that the work productivity of employees at the Maybrat District Health Office was mostly in the good category, namely 45 respondents (53.5%). From the results of the bivariate test, the variables that are significantly related to work productivity was the need for appreciation with a p value of 0.009 < 0.05, while the variables that were not significantly related to work productivity are physiological needs (p value 0.497 > 0.05), self-security needs (p value 0.142 > 0.05), social needs (p value 0.380 > 0.05), and self-actualization needs (p value 0.156 > 0.156).

Keywords: Factors; Relationships; Employee; Work Productivity.

* Corresponding author.
1. Introduction

Health is a highly important gift from God, and it is one of the essential human rights and one of the three key criteria in defining the human self-development index, along with education and wealth. As a result, health must be preserved, safeguarded, and enhanced in quality since an increase in the degree of health will make a genuine contribution to boosting the nation's competitiveness, which is critical in the age of globalization. As a consequence, in the current decentralization age, health requires specific attention in order to play its role in development.

The impact of health development efforts of the Indonesian people in general, and the Maybrat Regency Government in particular, may be felt throughout the villages. With the establishment of Community Health Centers, Sub Health Centers, and Village Midwives, it is typical to remark that health services are evenly spread and reach practically all corners in terms of equity.

Nevertheless, inequality still remains, notably in health care quality, which lowers health levels. So, to achieve fairness and enhance health services and public health, health development must be adjusted.

Health development is carried out through increasing: 1) Health efforts 2) Health financing 3) Health human resources 4) availability of pharmaceuticals, medical devices and food, 5) Health management and information and 6) community empowerment. These efforts are carried out by paying attention to population dynamics, disease epidemiology, ecological and environmental changes, advances in science and technology as well as globalization and democratization with a spirit of partnership and cross-sectoral cooperation.

The health human resources in question are medical and paramedical health workers and other health workers (employees) who are at the Office, Hospitals, Health Centers, Sub Health Centers (Pustu)

Regulation of the Regent of Maybrat Number 47 of 2007 concerning Position, Organizational Structure, Duties and Functions and Work Procedures of the Maybrat District Health Office, explains that the number of health workers at the Maybrat District Health Office in 2022 is 77 people.

Employees are one of the most important factors determining the progress of an organization. According to Thompson in Robbins (2010), the quality of the organization depends on the quality of the people in it. To get employees who are productive and achieve at work, organizations are required to have reciprocal tools that are in accordance with the performance of each employee in order to get employees who are productive and have the best performance in accordance with the expectations and goals of the organization [1].

Professional personnel are expected to always think, work hard, work all the time, be disciplined, honest, have great loyalty, and be dedicated to the success of their profession. Performance is a person's success in carrying out tasks, work results that can be achieved by a person or group of people in an organization according to their respective authorities and responsibilities, or how someone is expected to function and behave in accordance with the tasks that have been assigned to him, as well as the quantity, quality, and time used in carrying out tasks [2].
Workers with poor work motivation are unable to create good job at work because they are not serious and believe they are unable to work. As a result, performance suffers [3].

According to Hasibuan (2010), productivity is defined as a growth in output (results) in relation to input (input). Improved work productivity is only achievable if efficiency (time, resources, labor) and work systems, manufacturing processes, and worker skills are improved [4].

Work productivity has two dimensions: effectiveness, which leads to maximum performance, and meeting quality, quantity, and time requirements. The next dimension is efficiency, which refers to efforts to compare inputs with their actual utilization or how labor is done. Work productivity has a deciding component so that what is anticipated may be realized, according to a study done in 2016 at Pasar Rebo Hospital by Tite Kabul and Merlinda Silalahi, who indicated that it is vital to pay attention to the work discipline aspect. Working with a sense of urgency can boost job productivity [5].

The predictors of productivity in this study were physiological demands, work security, appreciation, social interactions, and self-actualization, according to an initial study done by researchers on 15 employees of the Maybrat District Health Office. The findings of this study show that the variables of performance effectiveness have an influence on the job productivity of employees at the Maybrat Health Office.

The preliminary research above also indicates that various aspects, including work discipline, work motivation, work ethic, and effective management, can impact the job productivity of officers at the Maybrat District Health Office. The management system of health information management and service quality in the office is ineffective and inefficient.

The issue at the Health Service is that workers or staff in various areas have a task that doubles as staff in the vaccination department and concurrently has a job, namely completing staff work in the leprosy department, which occurs owing to a lack of employee desire to come to the office. As a result, job productivity must be prioritized in order to foster discipline in work management. Owing to the numerous elements that might impact work productivity, it is critical to focus on the factors that have the greatest influence on the work productivity of employees at the Maybrat District Health Office.

Based on the description of the problem above, the researcher is interested in conducting research entitled "Factors Associated with Work Productivity of Health Office Employees in Maybrat District, West Papua Province".

2. Methods

This type of research will make use of a cross-sectional study design, which means that the data and information obtained will be carried out simultaneously at a certain time. On the other hand, the quantitative method will be used to describe data and information that affect the work productivity of the employees of the Maybrat District Health Office, West Papua Province, which will be obtained through a questionnaire. This research was carried out at the Maybrat District Health Office, West Papua Province, from November - December 2022. The
population is all employees working at the Maybrat District Health Office, totaling 77 people. The sample used was the saturated sample, namely the entire population of the Maybrat District Health Office employees, totaling 77 people. Data analysis was using chi-square test with significant level of 5%.

3. Results

3.1. Relationship between the Physiological Needs and Work Productivity

<table>
<thead>
<tr>
<th>Physiological Needs</th>
<th>Work productivity</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>11</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>Good</td>
<td>25</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>41</td>
<td>77</td>
</tr>
</tbody>
</table>

P-value = 0.497; RP=1.193; CI 95% (0.743-1.916)

Source: Primary data, 2022

Based on table 3.1, it is known that of the 30 respondents who lack physiological needs, there are 11 people (36.7%) whose work productivity is lacking, and of the 47 people who have good physiological needs, there are 25 people (53.2%) whose work productivity is lacking. The statistical test results using the chi square obtained a p value of 0.497 > 0.05. This shows that there is no significant relationship between physiological needs and employee work productivity at the Maybrat District Health Office. With a risk estimate of RP = 0.497 (RP < 1) with a 95% CI (0.743 - 1.916), it can be said that physiological needs was not a risk factor causing less work productivity.

3.2. Relationship between the Security Needs and Work Productivity

<table>
<thead>
<tr>
<th>Security Needs</th>
<th>Work productivity</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>10</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Good</td>
<td>26</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>41</td>
<td>77</td>
</tr>
</tbody>
</table>

P-value = 0.142; RP=0.673; CI 95% (0.384-1.181)
Based on table 3.2, it is known that of the 28 respondents whose security needs are lacking, there are 10 people (35.7%) whose work productivity is lacking, and of the 49 respondents whose security needs are good, there are 26 respondents (53.1%) who have less work productivity.

The statistical test results using the chi square obtained a p value of 0.142 (> α 0.05).

This shows that there is no significant relationship between the need for job security and the work productivity of employees at the Maybrat District Health Office. With a risk estimate of RP = 0.673 (RP < 1) with a CI of 95% (0.384 – 1.181), it can be said that the need for job security is not a risk factor that causes less work productivity.

3.3. Relationship between the need for appreciation and Work Productivity

<table>
<thead>
<tr>
<th>The need for appreciation</th>
<th>Work productivity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack</td>
<td>Good</td>
</tr>
<tr>
<td>Lack</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Good</td>
<td>28</td>
<td>41</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>46.8</td>
</tr>
</tbody>
</table>

P-value = 0.009; RP=1.738; CI 95% (1.161-2.601)

Based on table 3.3, it is known that of the 29 respondents whose need for appreciation was lacking, there were 8 respondents (27.6%) who had less work productivity, and of the 48 respondents whose need for appreciation was good there were 28 respondents (58.3%) whose work productivity was lacking.

The statistical test results using the chi square obtained a p value of 0.009 (<α 0.05).

This shows that there is a significant relationship between the need for appreciation and the work productivity of employees at the Maybrat District Health Office.

With a risk estimate of RP = 1.738 (RP > 1) with a CI of 95% (1.161 – 2.601) it can be interpreted that employees with less need for appreciation have a 1.738 times chance of experiencing less work productivity compared to employees with good need for appreciation.

3.4. Relationship between the Social Needs and Work Productivity
Table 3.4: The Relationship between the Social Needs and Work Productivity of Employees at the Maybrat District Health Office in 2022.

<table>
<thead>
<tr>
<th>The Social Needs</th>
<th>Work productivity</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack</td>
<td>n</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>12</td>
<td>54.5</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>24</td>
<td>43.6</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>46.8</td>
<td>41</td>
<td>53.2</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>n</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>10</td>
<td>45.5</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>31</td>
<td>56.4</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>41</td>
<td>53.2</td>
<td>77</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

P-value = 0.386; RP=1.250; CI 95% (0.769-2.031)

Source: Primary data, 2022

Based on table 3.4, it is known that of the 22 respondents whose social needs were lacking, there were 12 respondents (54.5%) whose work productivity was lacking, and of the 55 respondents whose social needs were good, there were 24 respondents (43.6%) whose work productivity was lacking. The results of the statistical test using chi square were obtained with a p value of 0.380 (<α 0.05). This shows that there is no significant relationship between social needs and employee work productivity at the Maybrat District Health Office. With an estimated risk of RP = 1.250 (RP > 1) with a CI of 95% (0.769 – 2.031) this means that social needs are a risk factor for work productivity but not significant because the lower limit value of the 95% CI is less than 1.

3.5. Relationship between the Need for Self-Actualization and Work Productivity

Table 3.5: The Relationship between the Need for Self-Actualization and Work Productivity of Employees at the Maybrat District Health Office in 2022.

<table>
<thead>
<tr>
<th>The Need for Self-Actualization</th>
<th>Work productivity</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack</td>
<td>n</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>11</td>
<td>36.7</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>25</td>
<td>53.2</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>46.8</td>
<td>41</td>
<td>53.2</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>n</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack</td>
<td>19</td>
<td>63.3</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>55</td>
<td>46.8</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>77</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P-value = 0.156; RP=1.353; CI 95% (0.899-2.036)

Source: Primary data, 2022

Based on table 3.5, it is known that of the 22 respondents whose need for self-actualization is lacking, there are 11 respondents (36.7%) whose work productivity is lacking, and of the 55 respondents whose need for self-actualization is good, there are 25 respondents (53.2%) whose work productivity is lacking. The statistical test results using the chi square obtained a p value of 0.156 (> α 0.05). This shows that there is no significant
relationship between the need for self-actualization and the work productivity of employees at the Maybrat District Health Office. With a risk estimate of RP = 1.353 (RP > 1) with a CI of 95% (0.899 – 2.036) it means that the need for self-actualization is a risk factor for work productivity but not significant because the CI value of 95% contains the number 1.

4. Discussion

4.1. The Relationship between the Physiological Needs and Work Productivity

The study found that 11 of 30 respondents lack physiological needs (36.7%) had lower work productivity, whereas 25 of 47 respondents with good physiological needs (53.2%) had lower productivity. Statistical test findings showed a p value of 0.497 (>0.05) and a Prevalence Ratio (RP) = 0.497 (RP <1) with a CI of 95% (0.743 – 1.916) indicating that physiological needs do not influence job productivity at the Maybrat District Health Office.

This study's results coincide those of Susanti (2014), who found p value = 0.522 > 0.05, indicating that income levels do not affect nurses' job productivity [6]. 44 employees (70%) of the Maybrat District Health Office agreed that their wage is enough to support their families. Benefits from working in the Health Service are 70% acceptable and satisfactory.

The results of research on physiological needs are in line with the theory of Physiological Needs (physical = biological needs), namely the needs needed to maintain one's survival, such as eating, drinking, air, housing, health, rest needs and others. Within the scope of work this includes needs such as comfortable air temperature at work, and a minimum salary that is sufficient for basic needs [7].

An explanation of the concept of human motivation from Abraham Maslow called "Theory of Hierarchy of Needs" according to Sofyandi and Garniwa (2007), refers to five basic needs arranged hierarchically, one of which is Physiological Needs [8]. The manifestation of this need is seen in three main areas, clothing, food and shelter. For employees, the need for salary, overtime pay, incentives, prizes and other facilities such as housing, vehicles etc. Being the basic motive of someone wanting to work effectively and can provide high productivity for the organization.

4.2. The Relationship between the Security Needs and Work Productivity

According to the study, 10 (35.7%) of the 28 respondents whose security needs were lacking had low work productivity, whereas 26 (53.1%) of the 49 respondents with strong security needs had high productivity. The Maybrat District Health Office's job security needs do not affect staff productivity, as shown by the chi square's p value of 0.142 (> 0.05). Security needs do not affect work productivity, according to interviews where 70% of employees whose work space conditions are safe exchange information if there is a security problem at work. This demand is for security and self-defense against outside dangers. Safety, health, protection, competence, and stability are examples [9]. Once a person's physiological requirements are satisfied to an appropriate degree, then the demands at the next higher level, namely the need for safety, begin to take precedence over those requirements. The demand for security encompasses not just the concept of physical safety but also the safety of
one's health and the assurance that they will be treated fairly in their profession or position.

The term "safety requirements" can also refer to the requirement for security, which can refer to either physical or psychological safety. When we talk about physical security, we're referring to both safety at work and safety getting to and from work. Occupational security refers to the efforts made to preserve and safeguard personnel as well as buildings and assets held, both inside the office environment and those that are located outside the workplace. Not only are employees who work in an office setting the target audience for efforts to establish job security assurances, but also employees who operate in the field are a target audience for these efforts [10].

4.3. The Relationship between the need for appreciation and Work Productivity

Employees are entitled to rewards as a form of reciprocal relationship for the contributions they make on the job. Awards are given to employees as a sign of appreciation for their hard work and also as a means of inspiration, with the expectation that this will have a beneficial effect on the workplace or the business. It may take the shape of presenting trophies or other forms of recognition to employees in order to demonstrate the office's appreciation for their expertise and dedication to successfully accomplishing the assignments they have been given. The study indicated that of the 29 respondents whose need for appreciation was inadequate, 8 (27.6%) had high work productivity, while of the 48 respondents whose need was good, 28 (58.3%) had poor work productivity. The statistical test employing the chi square yielded a p value of 0.009 (<0.05), indicating that Maybrat District Health Office employees' need for appreciation affects their work productivity. The study's findings agree those of Yonanda C and his colleagues (2014), with a p value of 0.003 < 0.05, indicating that the desire for appreciation has a favorable influence on employee performance. Satisfied esteem requirements boost employee performance [11]. According to respondent interviews, 70% of the twelve questions were good. In line with the results of interviews with respondents were out of the twelve questions given all were in the good category, namely ≥ 70%. According to Tohardi (2012), and Simamora (2014), awards are incentives that relate compensation to employee productivity to attain superlative performance competitive [12, 13]. Kadarisman (2012: 43) lists salary, incentives, praise, allowances, promotion, bonus, appreciation, and acknowledgment as markers of appreciation [14]. Suryo (2017) lists compensation, incentives, insurance, training, and development as reward markers [15].

4.4. The Relationship between the Social Needs and Work Productivity

Based on the results of the study it was found that 22 respondents who had less social needs, there were 12 respondents (54.5%) whose work productivity was lacking, and of the 55 respondents who had good social needs, there were 24 respondents (43.6%) whose work productivity was lacking. The results of the statistical test obtained a p value of 0.380 (<α 0.05) meaning that there is no relationship between social needs and employee work productivity at the Maybrat District Health Office. The results of the research are in line with research conducted by Yonanda C. and his colleagues (2014) that there is a positive significant influence between social needs on work productivity [11]. This shows that good social needs can improve employee work performance. In line with the results of interviews with respondents, all of the ten questions given were in the good category, namely ≥ 80%. Social needs include love, friendship, approbation, familial acceptance, attention, and affiliation.
Working together fulfills this requirement. Most insiders desire pleasant and joyful connections with friends and family from co-workers or leaders or superiors, so they may grasp association and solidarity at work [16]. Hasibuan (2010) defines social needs as those supplied by social position, acceptability, and respect [4]. Bangun (2012) lists social needs as affection, belonging, acceptance, and friendship [17]. Three social needs indicators are: 1. Acceptance in your home and workplace (Sense of Belonging). 2. Respect needs (Sense of Performance). 3. Participation needs (Sense of Participation).

4.5. The Relationship between the Need for Self-Actualization and Work Productivity

The study found that 11 of the 22 respondents with insufficient self-actualization demands (36.7%) and 25 of the 55 with excellent self-actualization (53.2%) had low work productivity. The statistical test showed a p value of 0.156 (> 0.05), indicating that self-actualization needs do not affect Maybrat District Health Office staff productivity. Robbins and Coulter (2010) define self-actualization as the desire to become one's potential. Self-Actualization indicators: Growth, Self-actualization, Self-fulfillment, and Motivation [18]. Self-actualization is the highest hierarchy of needs. Self-actualization is related to the process of developing one's real potential. The need to demonstrate one's abilities, skills and potential. The need for self-actualization has a tendency to increase its potential because it actualizes its behavior. Someone who is dominated by self-actualization needs likes tasks that challenge his abilities and expertise.

5. Conclusion

Based on the results of the discussion it can be concluded as follows:

a. The relationship between physiological needs is not significantly related to work productivity (p value 0.497 > 0.05).

b. There is no significant relationship between job security and work productivity (p value 0.142 > 0.05).

c. The relationship between the need for appreciation is significantly related to work productivity (p value 0.009 <α 0.05). With a Prevalence Ratio (RP) = 1.738 (95% CI (1.161 – 2.601) it can be interpreted that employees with less need for appreciation have less work productivity as much as 1.738 times compared to employees with good need for appreciation.

d. The relationship between social needs is not significantly related to work productivity (p value 0.380 > 0.05).

e. The relationship between self-actualization needs is not significantly related to work productivity (p value 0.156 > 0.05).

References


