Factors Affecting Employee Productivity on Government Organizations in Tanzania: A Case of Shinyanga Regional Secretariat, Tanzania

Elisha James, Felician Mutasa
1Graduate, Master of Science in Economics, The Open University of Tanzania, 2Centre for Economics and Community Economic Development, The Open University of Tanzania

mwakasongejames@gmail.com1, felicianmutasa1@gmail.com2

Abstract. The aim of this study was to examine the factors affecting employee productivity of government employees at Shinyanga Regional Secretariat in Tanzania. Government employees were the main point of the study and adopted a survey research design, an ordered logistic regression model and STATA for data analysis was applied. Sample size was 191 respondents, primary data was collected using descriptive questionnaires and triangulation. Results from the ordered logistic regression model (odds) show that, the odds of Trainings are not significant, trainings which have been asked considered all the trainings including seminars and workshops which were found not to relate to the carrier of position one holds in the office and thus it came out insignificant. Basing on the rule for significance level from the regression analysis, the coefficient of the effect of leadership style showed that, one-unit change in the effect of leadership style results in 0.087 units increase in labor productivity, meaning that, there is a significant relation (at p value of 0.000) between the effect of leadership style in Tanzania with respect to labor productivity. Therefore, we recommend that, Leadership style that is supportive and encourages is necessary in building working teams and promotes labour productivity at Shinyanga Regional Secretariat and when employees are not involved in designing, organization and planning the training, the evaluation of the training outcomes becomes difficulty. Furthermore, Leaders are to be trained on good leadership so as to apply a leadership style that works to the subordinates and there should be frequent evaluations checking if the leaders are participatory to the subordinates.

Keywords. Employee, Education, Leadership, productivity, Shinyanga, Tanzania

Introduction
It is important for a country, organization, departments and units to improve labour productivity. Chebet, (2015) argues that assessing and understanding the factors that affect performance of the employee and that is why productivity is a major concern for the global economy. However, from a global point of view there has been a slowdown in productivity growth i.e., labor production in the US has declined from 2005 on-wards, an average of only 1.3% per annum since then, compared to 2.8% annual growth over the past decade ago in 1995. In England 60% of workers were working at 65% of their capacity (Hilda, 2013; Imran, 2011)
Productivity in governmental organizations and private sector differs (Lawrence, 2010). While in Sub-Saharan Africa the economies are having lowest level of employee productivity (Coole, 2012). According to Adler et al. (2019), growth rates in employee’s productivity remain near historic lows in many advanced economies.

In Kenya, Otieno et al (2015), adopted the goal theory to study on the association between workers performance and labor relations practices the horticulture sector. The study targeted on generating the relationship between involvement, employee communication, and relationship and performance, finally examining the effect of leadership styles on the performance of the employee in horticultural sector (Kenya). The study found that, the organizations used employee engagement as an important strategy to improve their performance in the horticultural sector. Safari Park Hotel was one of the case study where the influence of leadership style on employee work performance in the industry of hospitality was practiced (Mwanjala, 2014). The aim of her study was to investigate the leadership styles of managers and how it affected the employee work performance. The study found that, directive style was no longer applied rather than transformational leadership styles and democratic leadership styles. Finally, the study posts out that, Manager’s leadership styles do affects the employee job performance either positively or negatively

Ng’ethe et al., (2012), argues that, the leadership styles and the role of the leaders themselves are very crucial to retain the employee. This is so because, motivation or discouragement of the employee depends on the leadership styles which may decrease or increase the employee performances and proclivity for retention in the organization (Rochelle, 2012). As well the main aim of this study to establish the influence of leadership style on employee’s performance in the government organizations in Tanzania.

In Tanzania, Diao et al. (2014), revealed that labour productivity grew at roughly 4% per annum between 2001 and 2012. However, Tanzania experienced negative to zero labour productivity growth within their non-agricultural sectors, meaning there was an overall rapid fall of productivity starting in 2012. Kahyarara (2019), posits that in Tanzanian manufacturing sector from 1990 till 2010 employee productivity had mixed trends.

In the Shinyanga Regional Secretariat office, the Departmental employee productivity index marked to be decreasing with an overall average of 2% annually in terms of service provisions to their customers including direct people needed for services, services within the office, supervisions of local government authorities and other stake holders as shown in table 1.1:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Human Resource &amp; Administration</td>
<td>64.1</td>
<td>49.7</td>
<td>61.9</td>
<td>59.1</td>
<td>53.4</td>
<td>51.5</td>
</tr>
<tr>
<td>2</td>
<td>Planning and Coordination</td>
<td>87.4</td>
<td>85.1</td>
<td>79.0</td>
<td>67.3</td>
<td>71.7</td>
<td>56.7</td>
</tr>
<tr>
<td>3</td>
<td>Economics and Wealth Production</td>
<td>67.3</td>
<td>58.4</td>
<td>57.2</td>
<td>57.1</td>
<td>63.3</td>
<td>61.0</td>
</tr>
<tr>
<td>4</td>
<td>Education</td>
<td>71.9</td>
<td>77.2</td>
<td>64.6</td>
<td>63.3</td>
<td>61.9</td>
<td>59.4</td>
</tr>
<tr>
<td>5</td>
<td>Legal Services</td>
<td>69.5</td>
<td>67.9</td>
<td>65.3</td>
<td>60.8</td>
<td>60.5</td>
<td>60.1</td>
</tr>
<tr>
<td>6</td>
<td>Internal Audit</td>
<td>61.0</td>
<td>53.6</td>
<td>64.4</td>
<td>63.2</td>
<td>60.1</td>
<td>58.3</td>
</tr>
<tr>
<td>7</td>
<td>Finance and Accounts</td>
<td>81.7</td>
<td>71.2</td>
<td>69.8</td>
<td>69.5</td>
<td>67.9</td>
<td>63.2</td>
</tr>
<tr>
<td>8</td>
<td>Health Management</td>
<td>81.4</td>
<td>72.7</td>
<td>63.1</td>
<td>59.0</td>
<td>57.2</td>
<td>54.8</td>
</tr>
</tbody>
</table>
As global competition increases, the value of production and its measurement become clearer, increased productivity will generate more revenue by rising state revenue, which helps to provide better services and improve quality of life (Bureš and Stropková, 2014). Workers leave organization when are not motivated enough, the less motivated workers can continue working at low performance and low productivity becomes the end result (Muganyizi, 2014). From the trends that Shinyanga Regional Secretariat has been having, it shows that there are some reasons for the trends which calls for necessity to be studied so that the Government can keep the productivity of the Regional Secretariat high. Therefore, the investigations on the factors affecting employee’s productivity at Shinyanga Regional Secretariat has the aim of suggesting the possibilities for improvements.

**Literature Review**

**Theoretical literature Review**

**Karl Mark’s theory of labour productivity**

Mark defined labour productivity as a change of working process that reduces the working time necessary for the production. That is, less work is needed to produce a bigger amount practical value (Marx, 1867).

The theory also postulates that optimizing the working process by reducing work hours can lead into the efficiency in production. Working productivity is mainly associated with numerous of factors, some of them are; the development level of science and technology, average skills of the work, and the social combination of the production process.

The one among the determinants of labour productivity is education including trainings to enhance working improvements. The higher the education level, the higher the human capital and labour productivity (Marx, 1867)

This theory was supportive to this study in examining the factors affecting employee productivity of government employee at Shinyanga regional secretariat in Tanzania because the theory tried to point out factors that led to labour productivity including trainings.

**Fiedler’s Theory**

Fred Fielder was one among the first researchers to develop a contingency theory which asserted that; the capacity of leader’s to lead is contingent basing on situational factors, among them include the leader’s preference styles, abilities, behaviour and characters of workers who intently depend on the situational factors. This theory advocates the close method to the management team through focusing on circumstances first despite of organizational means, to practice on a specified leadership style which will motivate the employee performance. According to Certo (2000), Field pointed out that, any leader has got a specific leadership style, such style may be either task oriented of people oriented.

Furthermore, Certo (2000), proceed that, despite of being task oriented or people oriented, better performance of the leaders depends upon the three features which are; task structure, leader member relations and the position power of the leader. The degree to which the leader has the support from the members of the group is what is called leader member

<table>
<thead>
<tr>
<th></th>
<th>Land and Infrastructure</th>
<th>72.5</th>
<th>64.1</th>
<th>63.0</th>
<th>63.1</th>
<th>62.4</th>
<th>59.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Local Government Management</td>
<td>89.8</td>
<td>89.5</td>
<td>72.3</td>
<td>85.6</td>
<td>69.4</td>
<td>53.1</td>
</tr>
<tr>
<td></td>
<td>Overall Productivity Index</td>
<td>74.66</td>
<td>68.94</td>
<td>66.06</td>
<td>64.80</td>
<td>61.78</td>
<td>59.80</td>
</tr>
</tbody>
</table>

Source: Shinyanga Regional Commissioner’s Office (2021)
relations. Any indicated procedures which are set for the employees to comply with in carrying out the tasks is referred to as task structure. Position Power is the proper authority posed to the leaders by the organization. Now, the first and fore most assumption is that, a person who want to try to persuade others must apply both task (directive) and relationship (supportive) behaviour.

The second underlined assumption is that, any leadership style depends on a particular situation; meaning that; the behavioral patterns of the leader will help him or her to get unique efficacies wanted to perform his/her tasks.

**The Path Goal Theory**

The Path-Goal theory, states that leaders should choose the right behaviour that suits the needs of their employees and the environment in which they work (Northouse, 2013). Leaders will be required to participate in a variety of leadership styles depending on the situation and the needs of the situation.

It assumes flexibility of the leaders, and suggests that location and employees' characteristics are the determinant factors for leaders' flexibility. Employees’ characteristics determine how nature and leadership are interpreted. Effective leaders define and help their employees achieve their goals to motivate them.

**Empirical Evidence**

Productivity has been a subject in many economic studies. Time used in working, policy and institutional changes as well as contracts being permanent or temporary have been found to be amongst the factors which affect the labour productivity (Addessi, 2014).

Sharma and Dash (2006) found that the subcontractor does not have a significant impact on employee productivity; it is a temporary measure of increasing employment and businesses. A continuous level of employment and productivity can be achieved if the state establishes policies that provide social security, marketing space, upgrade technology, training and skills for employees and above all infrastructure support for millions of small businesses.

Absence workers in the working Centre reduces the productivity of the organization as whole. Thus, workers with health cover are likely to be gratified their work places. Communication technologies have been found to improve productivity when a start-up business aims to increase quality by hiring more capital and more employees, growth occurs through sales profits, investments and employment. A positive situation would be an increase in the employment and productivity of workers (Subrahmanya, 2010). Organizational leadership, management processes, award structures and the number of people of senior leadership have implications for productivity.

Labour Productivity has been related with unemployment, as increased employee efficiency means there is not as much of work existing in the economy. It is termed ‘Productivity Trap’ by Jackson and Victor, (2011) which arises from the systematic pursuit of employee productivity, fewer people are needed to produce, If the economy is not growing less than the increase in employee productivity, workers can lose job. This has more to deal with macro level of policies to keep the market and the supply in the equilibrium. Foreign firms in domestic market also affects productivity (Koirala and Koshal, 1999).

Foreign firms use more capital-intensive techniques than domestic firms, in developing markets. Productivity is a major concern for profit-oriented organization, as represents an effective and efficient transformation of resources and determines the profitability (Sandbhor
and Botre, 2014). Therefore, organizational efforts should be conducive to achieving profitability, sustainability, increased customer satisfaction and employee satisfaction.

The productivity growth standards indicate the expected improvement in the productivity of employee that must be at global (Osipov and Krasova, 2019). The requirements relating to the productivity of the job must be defined as a priority based on external criteria (the possible accomplishments of the competitors), the company must be comparable in terms of employee costs with its competitors.

Developing Countries are having the problem with the wages. On Worker’s Day 2021 Trade Union Congress of Tanzania (TUCTA) suggested that the minimum wage should be TZS 900,000 but government workers are paid from TZS 300,000 which is having a very huge difference. Earnings rates affect productivity, the better paid the more efficient the less paid the less efficient (Opsahl and Dunnette, 1970).

In Tanzania, the studies on Labour Productivity are limited, the most extensive was conducted by Mbelle (2005) which investigated product performance in Tanzania, focusing on overall economic growth during the period from 1968 to 2000, and found that Tanzania had a growth in labor productivity and total productivity for all time. Product diversity is explained by the change in inputs, and that product growth in the manufacturing sector was statistically significant.

Szirmai et al. (2001) found a large production gap between the US and Tanzania, and this is due to a large technical gap between the two economies. The first rapid growth occurred after 1965, reaching a peak in 1973; and later declined gradually during the 1970s and 1980s, probably due to continued labour retention when production declined.

A series of studies such as those of Knight and Sabot (1990), Teal and Mans (2002), Harding and Teal (2004) measured the productive effect of a change in the quality of labour in full production in Tanzania, measured by education, trainings, and skills. But this is only one part of population estimates. The increase in the number of employees due to population change is particularly important, especially in developing countries.

Developing economies are often led by subsistence agriculture. To a large extent such an economy is dependent on unskilled labour and low-quality investments. Jobs can be done through quality education. Therefore, we expect an increase in the number of employees due to population growth to have a greater impact on productivity.

**Conceptual Framework**

In the present study, the conceptual framework identifies relationships between employee productivity and the determinants of employee productivity (independent and dependent variables) which are labour productivity (dependent variable) and factors affecting employee productivity (independent variables) which are effect of leadership, training design, office communication and experience (Brooks, 2018).
The organizations which provide trainings and workshops to their employee’s increases productivity, the same with leadership, if a leader sees the importance of organizational internal communications to enhance team work, promotion of new technology and Training which all increase productivity, if leadership remain in primitive ways affect labour productivity. The same I applicable to the experience, experienced employee add value to their productivity as they are well competent into their career performance.

**Methodology**

This study seeks to examine the factors affecting employee productivity in the Shinyanga Regional Secretariat, Tanzania. The study adapted the model of Ordered Logistic. The model originates from the model used by Yi, J. and Ifft, J. (2019) to analyse Labor-use efficiency and New York dairy farm financial performance in USA. The model is accompanied by four specific assumptions which are; dependent variable is unique and is an orderly multi-categorical variable, there are one or more independent variables, which can be continuous, ordered multi-class, or unordered categorical variables, no multicollinearity between independent variables and the model meets the proportional advantage assumption. This means that no matter where the splitting point of the dependent variable is, the influence of each independent variable on the dependent variable in the model does not change, that is, the regression coefficient of the independent variable has nothing to do with the splitting point. The econometric model used in the study is as of the form below:
\[
\logit(p(y \leq j)) = \beta_{j0} + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \cdots + \beta_n x_n
\]

\[
P = \frac{1}{1 + e^{-\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \cdots + \beta_n x_n}} = \frac{1}{1 + e^{-\sum \beta_i x_i}}
\]

Being specific on Variables that will be used, the model will be

Logit \((p(Y \leq j) = \beta_{j0} + \beta_1 \text{TRA} + \beta_2 \text{LDS} + \varepsilon)\)

Where,
\(Y\) = labour productivity
\(\text{TRA}\) = Influence of training design
\(\text{LDS}\) = Effect of leadership style
\(\beta_{j0}\) = is the regression constant term
\(\beta_1, \beta_2, \ldots, \beta_n\) = Coefficients
\(\varepsilon\) = Error term

**Results and Discussions**

Basing on the gender of the respondents, results show that, most of the respondents were males (52.9%) and the rest were females (47.1%). The study findings show that the information collected on factors that influence labour productivity at Shinyanga Regional Secretariat were reflected perspectives from both genders. The results further indicate that there was gender balance.

Table 1.1: Descriptive statistics of the Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>90</td>
<td>47.12</td>
<td>47.12</td>
</tr>
<tr>
<td>Male</td>
<td>101</td>
<td>52.88</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>191</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey data (2021)

Basing on the age of the respondents, the results show that, most of the respondents involved were in the age of 25 - 40 years (51.8%), others with the age that range from 41 to 55 years (27.7%). Some respondents had the age of less than 25 years (13.1%) and few with the age of above 55 years (7.3%). Findings show that Employees at Shinyanga Regional Secretariat are of different ages from youth, middle aged to old persons. The findings also reveal that most of the respondents (86.8%) were of the ages between 25 and above 55 years and therefore had rich experiences which rendered them conversant enough with factors that influence employee productivity.
Table 1.2: Descriptive statistics of the Age of Respondents

<table>
<thead>
<tr>
<th>Age of respondent</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 55</td>
<td>14</td>
<td>7.33</td>
<td>7.33</td>
</tr>
<tr>
<td>41-55</td>
<td>53</td>
<td>27.75</td>
<td>35.08</td>
</tr>
<tr>
<td>25-40</td>
<td>99</td>
<td>51.83</td>
<td>86.91</td>
</tr>
<tr>
<td>Less than 25</td>
<td>25</td>
<td>13.09</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>191</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

**Source: Survey data (2021)**

Basing on Level of Education of the respondents, the results show that, majority were degree holders (52.9%) and diploma (14.1%). Some respondents were holders of master degree (12%) and others hold secondary school certificates (11%). Few had primary school education (6.8%) and others were just professionals (3.1%). These findings indicate that majority of the employees at the Shinyanga Regional Secretariat are the University level of education holders and are therefore knowledgeable enough to provide information on factors that influence employee productivity.

Table 1.3: Descriptive statistics of the Level of Education of Respondents

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>6</td>
<td>3.14</td>
<td>3.14</td>
</tr>
<tr>
<td>Master Degree</td>
<td>23</td>
<td>12.04</td>
<td>15.18</td>
</tr>
<tr>
<td>Degree</td>
<td>101</td>
<td>52.88</td>
<td>68.06</td>
</tr>
<tr>
<td>Diploma</td>
<td>27</td>
<td>14.14</td>
<td>82.20</td>
</tr>
<tr>
<td>Secondary</td>
<td>21</td>
<td>10.99</td>
<td>93.19</td>
</tr>
<tr>
<td>Primary</td>
<td>13</td>
<td>6.81</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>191</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

**Source: Survey data (2021)**

**Correlation Analysis**

Using the Variance Inflation Factor (VIF) the model has shown that there is no multicollinearity among the variables and thus the regression was run. The criteria for knowing the existence of multicollinearity is to VIF values to be more than 10, while in the table below the values are less than five.
Basing on the rule for significance level from the regression analysis, the coefficient of the training design (0.077), imply that, one-unit change in the effect of training design results in 0.077 units decrease in labor productivity, the study concludes that there is an insignificant relation (at p value of 0.000) which means that normal employees do not attend trainings or seminars for some years.

The indication is that most of the workers do not upgrade their abilities only departmental and sections leaders go for seminars consistent a year, without upgrading the normal employee’s abilities, reduces the productivity of labour.

Further, a key informant asserted that,
“Training improves organizational efficiency in terms of preserving corporate image, acquiring and retaining employees. On the other side, training helps staff well understand their duties.”

Source: Survey data (2021)

Furthermore, many respondents agreed that, investing in employee trainings motivate them heavily where employee commitment increased. By so doing, performance of the employee will increase as supported by Schmitt (2016), the right employee at the organization will be retained through training and development programs which finally lead into the growth of profits and services sign in Tanzania with respect to labor productivity. Pigors, 2007, suggest that, skills are acquired through training and practice. Training should be planned, organized and aimed at achieving specific pre-determined goals. Pigors also shows a positive relationship between training and performance. This is because training gives the ability to perform tasks easily and effectively.

Contrary is applied to the coefficient of the effect of leadership style (0.049), which imply that, one-unit change in the effect of leadership style results in 0.049 units increase in labor productivity, the study concludes that there is a significant relation (at p value of 0.000) between the effect of leadership style in Tanzania with respect to labor productivity.

The results on leadership style showed that management leadership style affects productivity. Leadership which is not providing the needed support and being participatory to subordinates, on the other hand, the study found out that efficient departmental communication and service deliver affects labour productivity in an organization meaning that enhanced task variety and enhanced skill development were also other effects of career development on labour productivity in an organization. Another observed effect to employee productivity at the organization is that, the organization has got no succession plan to prepare future heads of departments, the available senior and principal officers are complaining that they are not involved on matters related to leaderships. Improved performance of employees is one of the effects of financial motivation on labour productivity, so leaders should interact with their followers in one way another for him/her to impact positively them. In an institution, the leader should lead the behaviour of workers with the purpose of helping the organization to gain its targets.

A respondent supported this study by saying that,

“Leaders need to be aware of the physical and psychological health of employees. If the physical and psychological health were affected negatively in any way, then the employees could not perform their best at work. The work environment would not engage. The employees’ psychological and physical health is critical for employee productivity”

Source: Survey data (2021)

Even the odds are high in Leadership style (1.62) while low in training design (1.08). The odds shows that, the odds of Trainings are not significant. This does not mean that the government should not consider working experience, because experienced workers can train other workers.

The magnitude of the coefficients of the independent variables also denoted the strength of the influence that they have on the dependent variable. The results indicate that employee productivity is strongly influenced by factors determining labour productivity as stipulated in the odds ratio table 1.6 results below.
Table 1.6 Odds ratio

| Labour | Odds Ratio | Std. Err. | z    | P>|z| | [95% Conf. Interval] |
|--------|------------|-----------|------|-----------|---------------------|
| LevelofEducation | 1.71908 | .4345651  | 2.14 | 0.032 | 1.047421 | 2.82144 |
| WorkingExperience | 1.133367 | .318432  | 0.45 | 0.656 | .6534559 | 1.866736 |
| Leadership | 1.638088 | .2920626 | 2.77 | 0.006 | 1.154974 | 2.232322 |
| OfficeCommunication | 1.660574 | .3205996 | 2.63 | 0.009 | 1.137419 | 2.2424353 |
| Trainings | 1.080406 | .2677996 | 0.31 | 0.755 | .6646611 | 1.7562 |
| /cut1 | 1.506267 | .5838189 |      | .3620028 | 2.650531 |
| /cut2 | 3.008173 | .6211134 |      | 1.790813 | 4.225533 |
| /cut3 | 3.611443 | .6385307 |      | 2.359445 | 4.86294 |
| /cut4 | 5.669429 | .6917079 |      | 4.313706 | 7.025152 |

Source: Survey data (2021)

Conclusions and Recommendations

The major conclusion that can be drawn from the current study is that; Leadership style that is supportive and encourages is necessary in building working teams and promotes labour productivity and when employees are not involved in designing, organization and planning the training, the evaluation of the training outcomes becomes difficulty. For productivity to increase, the leaders need to encourage their subordinates to provide services to the customers into the expected standards. Proper management that inspires workers needs to be cultivated. Public organizations leaders should stand as the leading examples, they are to be creative, innovative and inspirational through team work. They are required to work and manage by example, all these emulate the employees and definitely they become productive as far as good leadership embraced by care and value is concerned.

The attainment of education is essential for basic skills. However, this should be accompanied by professional training that should be the same for all employees. It is recommended that this organization and other similar organizations should look for skilled workers in the specific tasks, not only that, but also establish regular training to develop skills as the work environment is constantly changing for product development. There is sample evidence that with technical qualifications coupled with conventional training, quality production can be greatly improved.

References


