



## **JOB QUALITY AND EMPLOYEES' SATISFACTION AMONG SMALL SCALE MANUFACTURING INDUSTRIES IN TANZANIA**

**Mashenene, R.G.**

*Department of Marketing, College of Business Education, P. O. Box 2077, Dodoma, Tanzania.*

*g.mashenene@cbe.ac.tz*

### **ABSTRACT**

*This paper examines the effect of job quality (JQ) on employees' satisfaction among small scale manufacturing industries in Tanzania. A survey of 300 employees in small scale manufacturing industries was conducted in Dodoma, Mwanza and Dar es Salaam regions in order to collect quantitative data. In depth interview and Focus Group Discussions (FGD) were conducted to collect qualitative data. Descriptive statistics was performed to give means, frequencies and percent. Independent samples *t* – test was performed in order to compare the level of satisfaction between micro and small scale manufacturing industries. Further, Binary Logistic Regression Model was performed to determine the effect of job quality on employees' satisfaction. Moreover, Kruskal Wallis *H* test was performed to compare level of employees' satisfaction in Dodoma, Mwanza and Dar es Salaam regions. The results show that JQ has positive effect on employees' satisfaction. The results of independent samples *t* – test indicate a significant difference in levels of satisfaction between micro and small scale manufacturing industries employees. The results of Kruskal – Wallis *H* test indicate that there is no significant difference in levels of employees' satisfaction among regions. The study concludes that JQ is an important factor in employees' satisfaction.*

**Keywords:** *Job quality, satisfaction, employees, Industries, Tanzania*

### **INTRODUCTION**

Job quality (JQ) refers to a multidimensional concept that covers many aspects varying from wages, formal training and (flexibility in) working hours to implications of work, work autonomy and the meaningfulness of work (Kok *et al.*, 2011). JQ has a significant effect on the quality of life of employees and productivity of the work force. As such, improving the JQ is one of the means to improving productivity.

Micro and small scale manufacturing industries are widely recognized as the engine of economic development (Isaga, 2012). In 2010, there were over 20.8 million enterprises active in the non-financial business sector in the European Union (EU), of which 99.8% were SMEs which provide about 67% of the employment in the non-financial business economy (Kok *et al.*, 2011). Also the findings indicate that SMEs in EU offer better jobs though some indicators of JQ like social benefits (EQ indicator) and all indicators of WQ were not studied in this study.

In Africa the micro and small scale manufacturing industries represent the majority of all manufacturing industries, the highest growth rate is found in micro and small enterprises

ISSN: 2408-7920

Copyright © African Journal of Applied Research

Arca Academic Publisher



(Magasi, 2015). This implies that, they contribute large part of employment opportunities carrying for about 80 percent of employment share (Page and Söderbom, 2012; Stewart, 2013). However, a number of efforts have been taken in order to support SMEs in Africa. For instance, at the end of 2010 about US\$ 24.5 billion in total from multilateral development partners were offered to support SME. Furthermore, a study of Page and Söderbom (2012) conducted in 9 African countries identify *two potential problems confronting African SMEs; firm survival and quality of job*.

In Tanzania, there are approximately 2.7 million enterprises of which 98% are micro enterprises contributing to employment creation, income generation and stimulation of economic growth and about a third of GDP originates from SME sector (REPOA, 2008). However, the quality of the jobs created by such enterprises is not well known and this necessitated undertaking this study. Despite the increase in number of SMEs in Tanzania and the significant roles they play in jobs creation, so far there is little information available on the quality of jobs created by SMEs and its effects on the performance of SMEs. The aim of this study is to fill the gap in the literature by increasing our understanding the relationship between JQ and the performance of SMEs in Tanzania.

## **THEORETICAL REVIEW OF JOB QUALITY**

### **Maslow's Hierarchy of Needs Theory**

**Maslow's Hierarchy of Needs** (MHN) Theory was developed by Maslow in 1943 which addresses that, as humans meet "basic needs" they seek to satisfy successively "higher needs". In this case Maslow suggested that in order for the employees to be motivated to work in order to achieve higher needs, basic needs (physiological) needs must be attained first. In this case the physiological needs (lower needs) include food (meals), water (sanitation), sleep (accommodation facilities) etc. Maslow's basic concept is that, the higher needs in this hierarchy only come into focus once all the needs that are lower down in the pyramid are mainly or entirely satisfied. The implication of MHN theory in this study is that, employers need to think of good remuneration systems, ensure high degree of job security, involve employees in decision making, give training and development to employees and provide favourable working environment including adequate working tools with appropriate technology.

### **Job Quality**

Worldwide, the issues of job quality at work places has been become a concern of many researchers. For instance, Clark (2015) in Germany argued that what makes a job good is when it well-paid. Accordingly, the same study pointed out six dimensions of a good job; namely pay, hours of work including actual and desired hours, future prospects including promotion opportunities and job security, hard work such as hard physical work, stress and working in dangerous conditions, job content e.g. interesting job, job helps other people, usefulness of the job to society and autonomy and interpersonal relationships with management and co-workers. The study by Society for Human Resource Management (SHRM) (2016) in USA found that 88% of employees were satisfied with their current jobs over the past 10 years, as the result the USA economy has remained relatively stable over last many years. The same study further pointed out a number of job satisfaction parameters including respectful treatment of all employees at all

ISSN: 2408-7920



levels, compensation/pay, benefits, job security, trust between employees and senior management. Other parameters are organization's financial stability, work itself, career advancement, autonomy and independence to decision making, management's communication of organization's goals and strategies.

In this study, job quality has been customized to include that job offers good remuneration, job security, job flexibility, employee participation in decision making, employees' empowerment and conducive work conditions.

### **Employees' Satisfaction**

According to Kirangu (2015) in Kenya, employees' satisfaction is the result of good leadership or management, job satisfaction, physical environment, organizational culture, career growth and work groups and teams. Accordingly, Ismail and Velnampy (2013) in Sri Lanka asserted that employees' satisfaction in public institutions is determined by opportunity to job, work environment, participative environment, social environment, work autonomy, job stress, supervisory support, job security, self-actualization, promotional chances, pay and flexi-time. Further, Crespo et al. (2017) in European countries found that employees' satisfaction is the result of job quality which comes from how the work is developed, job security, type of contracts, pay and promotion prospects. These results from this study imply that managers should correctly understand employees' needs for better designed work environment. The study of Parvin and Kabir (2011) in Bangladesh asserted employees' satisfaction is the outcome of that working conditions, pay, promotion, job security, fairness, relationship with co-workers and supervision.

### **Job Quality and Employees' Satisfaction**

The study of Clark (2015) in Germany established that a correlation between employees' income and job satisfaction exists implying that managers have ensure that there is good job quality for enhanced employees' satisfaction. Markey et al. (2012) asserted that if employees perceive good work environment will lose intention to quit from their jobs implying that managers should create good work environment for desired employees' satisfaction. Similarly, the study of Sikowo *et al.* (2016) pointed out that conducive work environment is a source of employee motivation which results into organizational performance. The results from this study suggest that managers should create good work environment which impliedly results into high job quality and employees' satisfaction. Further, the study of Ganesan *et al.* (2017) in Malaysia revealed that leadership style, compensation and work environment have strong positive relationship with the employees' job satisfaction.

### **Conceptual framework**

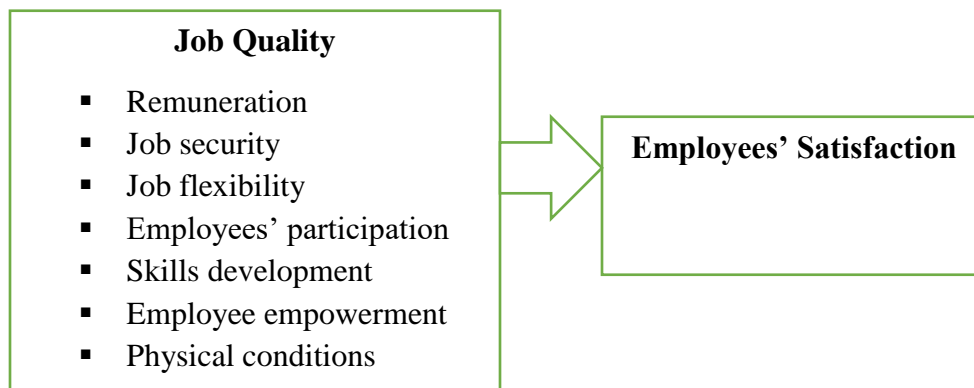
The relationship between independent variables (job quality) and dependent variable (employees' satisfaction) was presented in the conceptual framework. Job quality variables include remuneration, job security, job flexibility, employees' participation, skills development, employee empowerment and physical conditions. The dependent variable, in this study is employees' satisfaction. Generally, job quality being represented by its constructs tends to



influence employees' satisfaction. The arrow indicates the flow of the relationships from independent variables to dependent variable.

### Independent Variables

### Dependent Variable



*Figure 1: Conceptual framework*

## RESEARCH METHODOLOGY

Cross sectional research design was used in this study employed whereas data were collected at one point in time from November 2017 to January 2018. The study was carried out in Dodoma, Mwanza and Dar es Salaam cities which were selected purposefully due to the fact that Dodoma is fastest growing city due to shift of the government operations from Dar es Salaam to Dodoma. Mwanza and Dar es Salaam are oldest cities with a lot economic activities particularly small scale manufacturing industries. Three hundred (300) employees were surveyed using a questionnaire in which one hundred (100) employees from each city which were selected using non-proportionate stratified sampling technique. The use of non-proportionate stratified sampling technique was due the fact that the statistics on number of employees in the industry sector in these cities were not established. However, the selection of a sample from each city used multi-stage sampling procedures whereas the list of small scale manufacturing industries was first obtained from the respective city council. Thereafter, the list of employees was identified from the identified small scale manufacturing industries. Lastly, proportionate stratified sampling was used to select the sample from small scale manufacturing industries which were treated as independent strata. The strata were composed of small scale manufacturing in brick making, sunflower oil processing, welding, tailoring & weaving, detergents, cereal milling, food stuff processing, cottage and fish processing.

Semi structured questionnaire which comprised of closed and open ended questions was used to capture quantitative data. For the closed ended questions, 5-points Likert-type scale questions were used to capture the attitude and perceptions of employees toward the JQ and satisfaction of their employments. The Likert-type scales were first designed and developed by Rensis Likert have been useful to many related studies such as Mashenene (2018), Mashenene (2016), Lawson



(2014) and Kok *et al.* (2011). Before the questionnaire was fully administered for data collection it was pre-tested to enable the researcher to eliminate unsuitable questions and add more relevant missing information in order to sharpen the instrument to capture all required data. In order to capture qualitative data, in-depth interview using interview guide was carried out to six (06) employees whereas one (01) employee from each city representing small scale manufacturing industries whose employees were satisfied and one (01) who was dissatisfied with the JQ. Employees from each category in the in-depth interview were purposefully selected and later on six (06) case studies were developed from all cities. Accordingly, three (03) focus group discussions (FGDs), one (01) from each city was conducted to further gather qualitative data related to JQ and employees' satisfaction. The FGD which lasted between 1 and half hours comprised of 6-10 participants comprised of employees, employers, city council legal officers and trade officers of different age, sex, size of businesses and educational backgrounds.

Data analysis for qualitative data was performed using content analysis whereas as data recorded data using notes books, voice recorders and photos were transcribed and thereafter themes were formulated from them. Further, arguments provided by different interviewees were discussed, compared, contrasted and were matched with the current literature and empirical evidences. Qualitative findings from case FGDs and case studies were used to supplement quantitative findings.

The statistical Package for Social Sciences (SPSS) version 23 was used as the data analytical tool during quantitative data analysis. Quantitative data analysis was performed using descriptive and inferential statistics. The results of descriptive analysis were presented using means, standard deviations, frequencies, percentages tables, pie charts and bar graphs.

To determine the effect of JQ on employees' satisfaction binary logistic regression model (BLRM) was performed. Before BLRM was performed, important assumptions including multi-collinearity, outlier and influential cases, accuracy model percentage and sample size adequacy were tested to ensure fitness of data into the model as recommended by Pallant (2011). The results of all tests performed revealed that data fitted into the model and this allowed researchers to proceed with further BLRM analysis. The measurements of data in JQ were captured in several ways.

In this analysis, independent variables were captured and treated in several ways whereas employees' remuneration was measured using average amount paid to them as salaries/wages in TZS. To measure job security, flexibility and employee empowerment, a 5-point Likert scale statements were transformed and segregated into index scores.

Employees' satisfaction was measured using a 5-point Likert Scale whereas the 5-point Likert scale statements were transformed and segregated into index scores.

Further, employees' skills development, participation and physical work conditions were treated as dummy variable by 1=Yes, 0=No. On the other hand, age and education level of employees were measured as numeric values in number of years and years spent during schooling respectively. Finally, sex of employees was treated as dummy whereas 1 = male and 0 = otherwise. The binary logistic regression model was given by the following equation;

Before BLRM was performed, null and alternative hypotheses were stated and the relationship between JQ variables and employees' satisfaction was tested:

Null hypothesis ( $H_0$ ): JQ variables have no effect on the employees' satisfaction.

Alternative hypothesis ( $H_a$ ): JQ variables have effect on the employees' satisfaction.



Mathematically, the two hypotheses can be expressed as follows;

$$H_0: \beta_i = 0 \quad (1)$$

$$H_a: \beta_i \neq 0 \quad (2)$$

Where:

$H_0$  = null hypothesis

$H_a$  = an alternative hypothesis

$\beta_i$  = coefficients and odd ratios of independent variables (employees' remuneration, security, participation, skills development, empowerment, job flexibility and physical work conditions).

The binary logistic regression equation used was presented as follows;

$$\Pr(Y = 1) = \beta_0 + \beta_1 Re + \beta_2 Js + \beta_3 Jf + \beta_4 Ep + \beta_5 Sd + \beta_6 Ee + \beta_7 Pc + \varepsilon \quad \dots\dots(3)$$

Whereby;

- Y = Employees' satisfaction
- Re = Remuneration
- Js = Job security
- Jf = Job flexibility
- Ep = Employees' participation
- Sd = Skills development
- Ee = Employee empowerment
- Pc = Physical conditions
- $\beta$  = Coefficients estimated from the model
- $\varepsilon$  = Error term

Independent samples t – test was performed to determine the significant difference in levels of satisfaction between employees in micro and small scale manufacturing industries. According to the URT (2003) micro and small scale manufacturing industries are categorized using capital invested and number of employees whereas micro scale industries have capital up to TZS 5 million with employment of 1-4 people and small scale industries are those with capital above TZS 5 million and 200 million with 5-49 employees. The duration in number of years of employees expected to be retained at the job was captured during data collection and used to during t-test analysis. Further analysis was performed to test hypotheses; the null and alternative hypotheses using employees' expected retention period in years were stated as follows:

**Null hypothesis ( $H_0$ ):** There is no difference in the means of employees' expected retention period between employees in micro and small scale manufacturing industries ( $p < .05$ ).

**Alternative hypothesis ( $H_a$ ):** There is difference in the means of employees' expected retention period between employees in micro and small scale manufacturing industries ( $p < .05$ ).



Mathematically, the  $H_0$  and  $H_a$  hypotheses are presented as hereunder;

$$H_0: \mu_{1MSIs} = \mu_{2SSIs} \dots \dots \dots (4)$$

$$H_a: \mu_{1MSIs} \neq \mu_{2SSIs} \dots \dots \dots (5)$$

Where:

$H_0$  is a null hypothesis

$H_a$  = alternative hypothesis

$\mu_{1MSIs}$  = mean of employees' expected retention period between employees in micro

$\mu_{2SSIs}$  = mean of employees' expected retention period between employees in small

0.5 = the significance level in this study

Kruskal -Wallis H test is a non-parametric test which actually compares medians of three or more groups. It converts the scores on the continuous variables to rank across and then it evaluates whether the ranks for the three or more groups differ significantly (Pallant, 2011). During the analysis, 5 points Likert scale responses (1=strongly disagree, 5=strongly agree) were transformed to 3 levels (1=disagree, 2=neutral and 3=agree) and from these three transformed levels a total score was computed using excel programme (Mashenene, 2016; Nyange *et al.*, 2016). Further, the mean score was computed and then segregated into three ranks (1=low, 2=moderate and 3=high) and the mean rank for each group was compared.

Kruskal -Wallis H test was performed on the basis of the following assumptions; one of the variables was a continuous variable (computed ranks) which was treated as a dependent variable and another was a categorical variable (cities, 1 = Dar es Salaam, 2 = Dodoma, Mwanza) which was treated as independent variables (Pallant, 2011). Also, Kruskal -Wallis H test was chosen based on the reason that it is an alternative to a one-way between –groups analysis of variance (ANOVA) and it allows the researcher to compare the scores on some continuous variables for three or more groups (Pallant, 2011).

## **FINDINGS AND DISCUSSION**

### **Effect of Job Quality Variables on Employees' Satisfaction**

Table 1 presents the results of binary logistic regression. The results indicate that all job quality variables were positively related to employees' satisfaction with  $p < 0.001$  and  $0.05$ . The implication of these results suggest that managers should strive to make sure that employees are given good remuneration, design job with high flexibility in terms of working hours, employees are involved in decision making process, employees are given opportunities for short-term and long term training, employees are given autonomy in decisions and they are provided with appropriate working tools. These findings reveal that all JQ variables indicated high contributions toward employees' satisfaction since the odd ratio for all JQ variables was greater than 1 (Mashenene, 2016). These findings are supported by those of SHRM (2016), Clark (2015) and Kirangu (2015) which pointed out that the variables under this study were important indicators of employees' satisfaction in their studies.



*Table 1: Effects of JQ on Employees' Satisfaction in MSSIs in Tanzania*

<b>Job quality variables</b>	<b>B</b>	<b>S.E.</b>	<b>Exp(B)</b>
Remuneration	0.679***	0.161	1.871
Job security	0.453***	0.152	1.511
Job flexibility	0.553***	0.148	1.542
Employee participation	0.499**	0.145	1.222
Skills development	0.697***	0.164	1.991
Employee empowerment	0.444***	0.151	1.452
Physical work conditions	0.499***	0.144	1.321
Constant	-0.321*	0.147	0.821
Chi-square	36.779***		
Hosmer and Lemeshow $\chi^2$	4.932(8)(p=0.918)		
Cox & Snell R <sup>2</sup>	0.342		
Nagelkerke R <sup>2</sup>	0.388		
-2 Log Likelihood	263.743		

Dependent Variable: Employees' Satisfaction (Dummy variable, 1=satisfied, 0=dissatisfied), \*, \*\*and \*\*\* denote significant level at 10%, 5% and 1% respectively.

### **Satisfaction Levels between Micro and Small Scale Manufacturing Industries**

Table 2 presents the means and standard deviations of expected duration for employees' retention at the job was used to indicate the differences in the expected retention time in years between micro and small scale manufacturing industries. The results show that the mean of expected retention time for employees in small scale manufacturing industries was 0.531 as compared to the mean of 0.211 for employees in micro scale manufacturing industries implying that the mean of expected retention time for employees in small scale manufacturing industries was 5.3 times higher than that of micro scale manufacturing industries. The possible reasons for this difference can be due to the fact that small scale manufacturing industries have more advanced management systems which are most likely to offer better JQ variables e.g. higher remuneration than micro scale manufacturing industries. In light of these findings, an alternative hypothesis is accepted and the null hypothesis is rejected at 1%.

*Table 2: T-test Results for Independent Samples Using Expected Retention Period*

<b>Variables</b>	<b>Industry Category</b>	<b>No.</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>	<b>t</b>
Expected	Micro scale	205	0.211	0.2887	0.02897	3.102***
Duration/years	Small scale	95	0.531	0.2242	0.02325	

### **Kruskal-Wallis H Test Results**

Table 3 presents the Kruskal-Wallis test across Dar es Salaam, Dodoma and Mwanza cities on the levels of employees' satisfaction with their jobs. The results median scores indicate that there no statistical difference in levels of employees' satisfaction across the three cities implying that the level of employees' satisfaction is the same across three cities in which the study was





undertaken. From these findings therefore, the null hypothesis is accepted and an alternative one is rejected.

*Table 3: Kruskal-Wallis Results*

City	No.	Mean Ranks	Median	Chi-Square	df	P-Value
Dar es Salaam	100	120.32	20.00	3.679	2	0.202
Dodoma	100	123.11	20.00			
Mwanza	100	121.40	20.00			
<b>Total</b>	<b>300</b>		<b>20.00</b>			

## CONCLUSION AND RECOMMENDATIONS

The study concludes that job quality variables; namely remuneration, job security, job flexibility, employee participation, skills development, employee empowerment and physical work conditions have a positive effect on job satisfaction. Moreover, the study concludes that the level of satisfaction between micro and small scale manufacturing industries differ statistically whereas employees in small scale manufacturing industries demonstrated higher satisfaction level compared with employees in micro scale manufacturing industries. Further, the findings reveal that no statistical difference in level of employees' satisfaction across the three cities.

### Recommendations

The following are recommendations based on the research findings;

- i) Policy makers through the ministry of labour, employment and youth development should ensure that job standards are set and implemented accordingly by micro and small manufacturing industries. These job standards should include among other things job contract, working hours per day, minimum salaries/wages and security guidelines. These standards will help employees to work in good work environment since any enterprise which will violate such standards should be subjected to penalties. Further, the ministry in should carry out sensitization campaigns to create employees' awareness about the standardized job quality indicators.
- ii) Owners of micro and small manufacturing industries should make sure they engage employees with contracts, pay them the standardized pays and timely, provide employees with necessary working tools so as to enhance employees' satisfaction and consequently improve organizational performance.
- iii) Employees of micro and small scale industries should collectively formulate employees' associations at their work places so as be powerful in bargaining with their employers.



### **Areas for Future Researches**

The following are suggested areas for future researches;

- i) A study that involves both employees and employers in micro and small scale manufacturing industries should be conducted in order to collect from both sides which will lead into rational conclusions
- ii) A study that involves rural areas particularly districts should be conducted in order to establish the relationship of job quality and employees' satisfaction at district levels and not only among cities as it was under this study.

### **REFERENCES**

- Clark, A. E. (2015). *What makes a good job? Job quality and job satisfaction*. IZA World of Labor, Germany. doi: 10.15185/izawol.215.
- Crespo, N., Simeos, N. and Pinto, T. C. (2017). Determinant Factors of Job Quality in Europe. *Argumenta Oeconomica*, 1(38), 16-40. DOI: 10.1561.aoe.2017.1.01.
- Ganesan, J., Ling, X. W. and Mun, L. K. (2017). Determinants of Employees' Job Satisfaction in the Malaysian Manufacturing Sector. *Research Journal of Applied Sciences*, 12(10-12), 449-454.
- Isaga, N. (2012). *Entrepreneurship and the growth of SMEs in the furniture industry in Tanzania*. VU University, Amsterdam, Netherlands.
- Ismail, M. B. M. and Velnampy, T. (2013). Determinants of Employees Satisfaction (ES) in Public Health Service Organizations (PHSO) in Eastern Province of Sri Lanka. *European Journal of Business and Management*, 5(21), 62-70.
- Kirangu, F. K. (2015). Relationship between employee Satisfaction and Service Quality: A Survey of Funeral Homes in Nairobi City County. Dissertation for the Award of Master Degree in Business Administration, University of Nairobi, Kenya. 57pp.
- Kok, de J., Vroonhof, P., Verhoeven, W., Timmermans, N., Kwaak, T., Sniijders, J. and Westhof, F. (2011). *Do SMEs create more and better jobs?* EIM Business and Policy Research. Zoetermeer, The Netherlands
- Lawson, M. (2014). *The Impact of Risk Propensity on Corporate Entrepreneurship*. Dissertation for Award of PhD Degree at Pretoria University, South Africa, 100pp.
- Markey, R., Ravenswood, K. and Webber, D. J. (2012). *The impact of the quality of the work environment on employees' intention to quit*. Economic Working Paper 1220. University of the West of England. 35pp.
- Mashene, R.G. (2018). Effect of Service Quality on Students' Satisfaction in Tanzania Higher Education. *Business Education Journal*.
- Mashene, R. G. (2016). Socio-cultural Determinants of Entrepreneurial Capabilities among the Chagga and Sukuma Owned Small and Medium Enterprises in Tanzania. Thesis for Award of PhD Degree at Sokoine University of Agriculture, Morogoro, Tanzania. 274pp.
- Parvin, M. M. and Kabir, M. M. N. (2011). Factors Affecting Employees Job Satisfaction of Pharmaceutical Sector. *Australian Journal of Business and Management Research*, 1(9), 113-123.



- Page, J. and Söderbom, M. (2012). *Is Small Beautiful? Small Enterprise, Aid and Employment in Africa*. UNU-WIDER. Working paper 2012/94.
- Pallant, J. (2011). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows*. 4<sup>rd</sup> ed. Open University Press, McGraw Hill, New York, United States. 335pp.
- REPOA (2008). *The Role of Small Business in Poverty Alleviation: The Case of Dar Es Salaam, Tanzania*. Mkuki na Nyota Publishers, Dar Es Salaam, Tanzania. 39pp.
- Sikowo, D. C., Namusonge, G. S., Makokha, E. N. and Nyangechi, A. K. (2016). Determinants of Employee Satisfaction on Organizational Performance: A Survey of Trans Nzoia Country Government. *International Journal of Academic Research in Business and Social Sciences*, 6(10), 77-94.
- Society for Human Resource Management (SHRM) (2016). Employee Job Satisfaction and Engagement. Revitalizing a Changing Workforce. A Research Report. SHRM, USA. 68pp.*
- United Republic of Tanzania (2003). *Small and Medium Enterprise Development Policy 2003*. Ministry of Trade and Industry, Dar Es Salaam, Tanzania. 35pp.