

Employees' Participation and Innovative Work Behaviour in Manufacturing Small and Medium Enterprises in Tanzania

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Abstract

This article investigates the influence of Employees' Participation on Innovative Work Behaviour in Manufacturing Small and Medium Enterprises in Tanzania. Specifically, the article examines the influence of employees' participation on creativity oriented innovative work behaviour and the influence of employees' participation on implementation oriented innovative work behaviour. The study applied the Structural Equation Modelling to analyze data elicited from three hundred and eight nine (389) respondents. Results revealed that, employees' participation has a significant positive influence on both creativity oriented innovative work behaviour and implementation oriented innovative work behaviour. The article recommends that, SMEs' managers should involve employees directly on issues connected with the production, processes and service delivery. Theoretically, the study results proved the applicability of the Social Exchange Theory in the context where it has not researched widely and the study results will contribute to the development of public policies, particularly the ones related to SMEs and entrepreneurship development in Tanzania.

Key Words: Employees' participation, Innovative work behaviour, Creativity oriented innovative work behaviour and implementation oriented innovative work behaviour.

Introduction

The business environment in world economies is dominated by Small and Medium Enterprises (SMEs). According to Ntiamoah, Opoku, Abrokwah and Baah-Frimpong (2014), the sector is important for economic and social development in both developed and developing countries. In Tanzania, SMEs are considered to be an engine of economic growth. According to the URT (2016), the manufacturing sector of which 90% of companies are SMEs, contributes to 5.25% of GDP. The Tanzanian Five Year Development Plan (FYDP) 2016/17 – 2020/21 provides that, manufacturing SMEs are considered as very important sector in the government's effort to transform the country into semi industrialized country by 2025, because they are a leading sector in the industrialization process.

Despite the importance attached to it, manufacturing SMEs in Tanzania seem to be weak in competing in the market, both nationally and internationally. Most of start-ups fail while the surviving ones operate at loss. The FYDP II, 2016/17 – 2020/21, identifies innovation as a

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driving factor necessary for the ability of manufacturing SMEs to compete. This is supported by Ishak and Che Omar (2013) who argue that, innovation is important for SMEs to handle any encountered crisis.

Raj and Sirvastava (2013) contend that innovation is initiated by employees. Innovation occurs if employees show Innovative Work Behavior (IWB), which include creativity oriented IWB, and implementation oriented IWB. IWB assists employees in recognizing problems and creating solutions for them. It is a crucial asset for a firm's success in a dynamic environment, as it improves effectiveness of organizational processes and sustains competitive advantage for a firm's survival (Dorenbosch, Van Engen & Verhagen, 2005).

IWB can be developed, sustained and enhanced by organizational factors. Several studies (e.g. Bysted, 2013; Ramamoorthy, Flood, Slattery & Sardesai, 2005; Wojtczuk, 2014) establish several factors that influence IWB. These factors include job rotation, recruitment and selection, employee involvement, wages, team work, training, employees' communication, job autonomy, performance appraisal and supervisor support. Also other studies such as Dorenbosch *et al.*, (2005) mentioned that employee participation has an influence on IWB.

This study seeks to establish how employees' participation can be used to promote employees' IWB required for increasing SMEs' manufacturing ability to compete in the market. IWB will enable manufacturing SMEs to play their role in transforming most developing economies into middle income economies as explained above.

Sofijanova and Chatleska (2013) describe employees' participation as a process of involving employees in decision making and problem solving in order to utilize their input towards achieving higher individual and organizational performance. It can be direct or indirect. Direct employees participation is implemented without workers representatives and indirect participation involves mediation of representatives, like trade unions and workers' councils.

In this study, employees' participation is defined as the process of involving employees in the decision making process and problem solving, rather than simply acting on orders from the top management in order to better utilize their potentials and better implementation of organizational goals. It includes direct employees participation only since in SMEs employees are involved directly in the issues connected with production, processes or service delivery (Marchington, 1992). Abdulah, Hamad and Shamsudin (2010) argue that involving employees increases their commitment towards their organization, which in turns stimulates the level of their innovativeness in organizations.

In that endeavor, the study adapts the Social Exchange perspective to investigate the influence of employees' participation on IWB using a sample drawn from manufacturing SMEs in Tanzania. In line with the Social Exchange theory, employees are expected to reciprocate through IWB when they are involved effectively. From the perspective of Social Exchange (Blau, 1964), employees who perceive their organizational environment as supportive feel obligated to reciprocate with behaviours that are beneficial to the organization.

The extant literature indicates that, most studies examining the influence of employees' participation on IWB consider employees participation as part of HRM Practices. The studies did not consider individual practices such as employees' participation. The individual practices may

have different influence on IWB. Moreover, they considered IWB as a one-dimensional variable. However IWB can be categorized into two, creativity oriented IWB, and implementation oriented IWB (Jong, 2007). Considering the classification of IWB, It is important to know the influence of employees' participation on each category of IWB.

Furthermore, the reviewed suits were conducted in large firms and not SMEs. SMEs are different from large firms in terms of managing their workforce (Greenidge, Alleyne, Parris & Grant, 2012). Most of them operate informally and are less specialized. Because of their limitation in resource capabilities, they create policies or adopt management techniques according to contingency or even by chance and the owners are the ones who perform most of the personnel functions (Arau & Medina, 2014). Basing on this fact, the findings of organizational factors research in large firms may not be generalized to SMEs. Therefore, there is a need for a shift of focus on employees' participation from large firms to SMEs.

On the basis of the aforementioned limitations in the existing literature, there is a need for conducting a study on the influence of employee participation on IWB in manufacturing SMEs. The findings of this study will contribute to the knowledge of determinants of IWB by explaining the influence of employees' participation in IWB. The study will inform manufacturing SMEs stakeholders on ways that innovation can be promoted through employees' participation. The research findings will also serve as a source of information to researchers, academicians and policy makers.

Theoretical Perspective

This study is based on Blau's (1964) Social Exchange Theory (SET) which according to Cropanzano and Mitchell (2005), is among the most influential conceptual paradigms for understanding workplace behaviour. SET provides that, obligation is generated through a series of interaction between parties who are in reciprocal interdependence (Blau, 1964). According to Saks (2006), reciprocity involves rules of exchange whereby the actions of one party lead to a response or actions by the other party. In the current study reciprocity within an organization refers to the cooperative exchange between employees and management.

Employees may choose to be innovative as a result of reciprocating to what the organization has done for them. When the organization involves employees in decision making, employees repay back through positive behaviours. This line of reasoning assumes that, practices such as employees' participation are viewed by employees as organization's commitment towards them, which is then reciprocated back to the organization by employees through positive behaviours. SET provides a key conceptual underpinning for understanding the exchange relationship between employees and organizations. Therefore, the theory provides the basis for understanding relationships in an organization through employees' participation on one hand and reciprocation by employees on the other hand.

Employees' Participation and IWB

Abdulah, Hamad and Shamsudin (2010) provides that, employees' participation increases employees' commitment towards their organization, which in turn would stimulate the level of innovativeness in an organization. By involving low cadre employees' participative decision making gives employees an opportunity to be involved in initiation, formulation and implementation of decision that will affect them. In their study, Gilbert and Tang (1998) found

that, giving the workers a greater share of decision making is one of the key factors that breed trust in organizations.

In line with SET, employees will feel obligated to innovate so as to repay back to organization for involving them. In many previous studies, IWB has been considered as a one-dimensional variable. However, IWB can be categorized into two; creativity oriented IWB, and implementation oriented IWB (Jong, 2007). Considering the classification of IWB, which has not been considered by reviewed studies, this study hypothesizes that:

H1a Employees' Participation has a positive influence on Creativity Oriented IWB.

H1b Employees' Participation has a positive influence on Implementation Oriented IWB.

Research Methods and Material

Cross Sectional Research Design was used to examine the influence of employees' participation on IWB in manufacturing SMEs. 389 SMEs were randomly selected from a total of 23,695 Manufacturing SMEs (NBS, 2012). The study was conducted in four regions Dar es Salaam, Morogoro, Mbeya and Manyara. Questionnaire was used to collect data that were analyzed using the Structural Equation Modelling (SEM). Because of the need to test multiple relationships simultaneously the use of SEM deemed appropriate. In assessing the internal consistency, the Cronbach alpha coefficients of all variables were at least 0.7 and demonstrated that there was internal consistency as suggested by Nunnally (1967).

Measurement of Variables

Employees' participation was measured using a scale adapted from Boselie *et al.*, (2000). The scale has established reliability and validity and has been used in many other studies thus, making it a valid instrument for measuring employees' participation in the current study. IWB, which is a dependent variable, was measured in terms of creativity oriented IWB and implementation oriented IWB. The scale for measuring IWB was adapted from De - Jong & Hartog (2010) and Scott & Bruce (1994). Their scales have been widely used to measure IWB (Abdullah *et al.*, 2014; Bysted, 2011; Bos-Nehles & Veendal, 2017 and De Jong, 2007). Creativity oriented IWB was measured by items like; I pay attention to issues that are no part of my daily work and I find new approaches to execute tasks. Implementation oriented IWB was measured by items like; I participate in implementation of ideas and I promote ideas to colleagues so that they have a chance to become implemented by others.

Research Results

Multivariate Assumptions

The study applied SEM as the data analytical technique for testing the hypotheses. Several assumptions of multivariate data analysis were tested prior to testing the hypothesized relationships. These include missing data, outliers, normality, homoscedasticity and multicollinearity (Kline, 2011). The missing data were checked but, there was no missing data. Univariate outliers were examined using $Q3-2.2(IQR)$ and $Q1-2.2(IQR)$. 21 out-of-range values were detected and were deleted from the data set. Multivariate outliers were detected using SPSS Mahalanobis distance (Mahalanobis D^2). 6 out-of-range values were detected. The values were deleted from the data set.

Normality was tested by P P plots and the distribution was found to be fairly normal and homoscedasticity was tested by using scatter plots and data were evenly distributed. In checking for multicollinearity, the study applied Value Inflated Factor (VIF) and Tolerance Value (TV). The calculated VIFs and TVs showed that there was no multicollinearity problem among the variables because VIF in all factors were less than 10 and TV were greater than 0.1 as supported by (Williams, 2015).

Confirmatory Factor Analysis

Prior to testing the hypothesis by using SEM, it is important to assure the status of the measurement modules (**Confirmatory Factor Analysis-CFA**). Each model should fit data. For a model which fits data well, the standardized regression weight of each item should be above 0.50 and the squared multiple correlation of each item must be above the cutoff point of 0.40 as it has been suggested by Wolfinger and Gilly (2003). The ratio of chi square to degree of freedom (CMIN/DF) should be less than 5 (Bollen 1989; Ullman 1996), The Goodness of fit statistics (GFI) should be ≥ 0.90 (Byrne, 2010), The Adjusted Goodness of fit statistics (AGF) should be ≥ 0.80 (Chau and Hu, 2001), CFI ≥ 0.90 (Hair *et al.* 2010) and Root Mean Square Error of Approximation (RMSEA) should be \leq to 0.1 (Thadan and Cheung, 2011).

The CFA for employees' participation was conducted. Initially there were seven items that explain the employees' participation. Two items did not meet the minimum acceptable standardized regression weight and squared multiple correlations. The items were deleted from the list of items to be included in further analysis.

After modification, the model remained with five items that qualified to continue with further analysis. The five items had acceptable regression weights and squared multiple correlations. The standardized regression weights ranged from 0.64 to 0.79 above the recommended value of at least 0.5 while the squared multiple correlations ranged from 0.42 to 0.63 above the recommended value of at least 0.4. The model had a chi-square value of 21.709, while the degree of freedom (df) was 14 with the P-value of 0.08. Other goodness of fit indices, namely GFI, AGFI, CFI and RMSEA were all within the recommended values, which indicated that the model fitted the data well.

The measurement model for Creativity Oriented IWB was also performed. Initially, it had eight items. Two items (COB6 and COB7) were dropped because they did not meet minimum acceptable standardized regression weight and squared multiple correlation. The analysis for model modification was performed and the model remained with six items. The standardized regression weight of each item was above 0.50 and the squared multiple correlation of each item was above the cutoff point of 0.40. The model had a chi-square value of 19.257, while the degree of freedom (df) was 14 with the P-value was 0.155 Other goodness of fit indices, namely GFI, AGFI, CFI and RMSEA were all within the recommended values, which indicated that the model fitted the data well; hence qualified for further analysis.

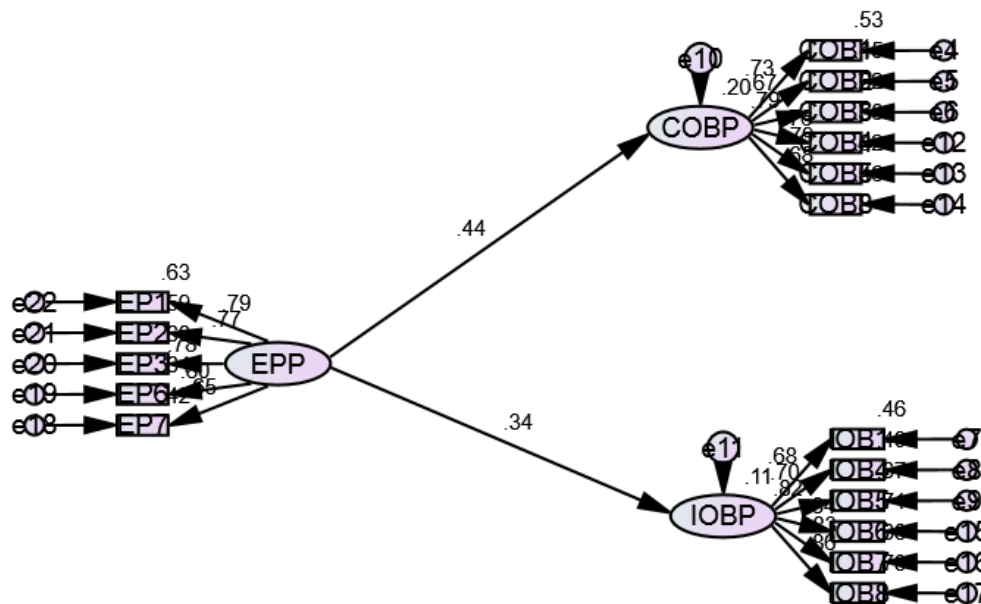
The CFA for Implementation Oriented IWB was also performed in order to select items that would be included in the final structural model. There were 8 items developed to form implementation oriented IWB variable. The initial model produced two items which were not

qualified to continue with further data analysis. The analysis to modify the model was performed. After analysis of modification, the model remained with six items. The standardized regression weight of each item was above 0.50 and the squared multiple correlation of each item was above the cutoff point of 0.40. The model had a chi-square value of 58.339; while the degree of freedom (df) was 20 with the P-value was 0.00. 1 Other goodness of fit indices, namely GFI, AGFI, CFI and RMSEA were all within the recommended values, which indicated that the model fitted the data well and qualified for further analysis.

Hypothesis Testing

The study investigated the influence of employees’ participation in IWB which was measured in two dimensions; creativity oriented IWB and implementation oriented IWB. Therefore, the study had two hypotheses that were tested using SEM. H1 stated, “Employees’ participation has a positive influence on creativity oriented IWB” and H2 stated, “Employee Participation has a positive influence on implementation oriented IWB”. The goodness of fit indices of hypothesized model was assessed. The model yielded Chi-Square of 309.033 with degree of freedom of 117 and p-value of 0.000. In addition, GFI= 0.906, AGFI=0.878, CFI=0.943 and RMSEA= 0.067. In general, the fit indices indicated that the model adequately fitted to the data. CMIN/DF should be less than 5 (Bollen 1989; Ullman 1996), $GFI \geq 0.90$ (Byrne, 2010), $AGFI \geq 0.80$ (Chau and Hu, 2001), $CFI \geq 0.90$ (Hair *et al.* 2010) and $RMSEA \leq$ to 0.1 (Thadan and Cheung, 2011). Figure 1 depicts a model which shows the influence of employees’ participation on IWB.

Figure 1. Structural Model for Employees’ Participation and IWB



Source: Field Data 2018

The model shows that, the additional unit of standard deviation of employees’ participation led to the 0.44 significance increase in standard deviation of creativity oriented IWB. Also it shows that the additional unit of standard deviation of employees’ participation led to the 0.34 significance increase in standard deviation of implementation oriented IWB.

The estimation of the hypothesized model showed that both hypotheses were significant. The results are shown in Table 1 with reference to the standardized estimates, critical ratio and significant ratios.

Table 1. The Regression Weights for the Direct Relationship

Path	Estimate	S.E.	C.R.	P
COB <--- EP	.328	.046	7.160	***
IOB <--- EP	.248	.043	5.769	***

Source: Field Data (2018).

*** means it is significant at 0.001

The results indicated that, employees' participation has a positive influence on both, creativity oriented IWB and implementation oriented IWB. Basing on the results, H₁ was supported because the β coefficient was .328 and significant at 0.01. H₂ was also supported because results indicated that employees participation has a positive influence on implementation oriented IWB (β coefficient was .248 and significant at 0.01).

This shows that involving employees in different matters concerning products services and processes encourage employees to willingly engage in innovative work behavior which includes both creativity oriented IWB and implementation oriented IWB.

Discussion of the Results Findings

This study shows that employees' participation is a determinant of IWB. The result is within expectations as other few who found that, employees' participation has a positive influence on employees' outcomes. For instance, Khalid and Quresh (2007) found out that, employees' participation influence job satisfaction, employee commitment and employees productivity positively. Other studies such as Kasaya and Munjuri (2018), found out a positive relationship between employees' participation and other employees' outcomes. However, while the latter studies examine the influence of employees' participation on other employees' outcome, they did not explore the influence of employees' participation on IWB which include both creativity oriented IWB and implementation oriented IWB. The finding of this study indicates that, employees' participation influences employees to be innovative. Employees are more likely to generate new products and services if they are given a voice, autonomy and decision-making power by the organization in the form of increased participation. Employees' participation is not to be seen in relation to social movements and employee rights anymore, but in relation to innovativeness and competitiveness of firms and even whole economies.

Conclusion and Implication

The article intended to examine the influence of employees' participation in employees' IWB in manufacturing SMEs in Tanzania. Specifically, the study intended to examine the influence of employees' participation on creativity oriented IWB and the influence of employees' participation in implementation oriented IWB. The results indicated that, employees' participation has a positive influence on creativity oriented IWB and also employees participation

has a positive influence on the implementation oriented IWB. Theoretically, the study results proved the applicability of the Social Exchange theory in context where it has not researched widely. When an organization involves employees in different matters concerning products, process and service the employees repay back through acceptable behaviour.

Practically the results of the current study tell the manufacturing SMEs that, employees 'participation is the catalyst for creativity oriented IWB and implementation oriented IWB of their employees. So they have to involve their employees in decisions that involve products, process and service. In addition, SMEs managers or leaders should emphasize on receiving employees' opinions, working on employees' opinions as part of involving them which in turn will make these employees more creative and innovative.

This article will contribute to the development of public policies, particularly the ones related to SMEs and entrepreneurship development in Tanzania. For instance, the 2003 SMEs development policy has not included issues of innovative work behavior despite their importance in promoting innovation within SMEs. Furthermore, the mentioned policy includes managerial challenges; although little is known on employee involvement skills and the way they influence innovative work behavior.

Limitation of the Study

In Tanzania, SMEs have been categorized into three groups. There are SMEs dealing with service, trade and manufacturing (NBS, 2012). The mentioned groups differ in terms of their business characteristics which may result to a different influence of employees' participation on IWB. The findings of this study did not consider other types of SMEs such as trade and service. Furthermore, the influence of employees' participation on IWB can be moderated by certain factors. This study did not consider any factor that can moderate the relationship between employees' participation and IWB. The study considered the direct relationship only.

Areas for Further Study

It is important to conduct a similar study on other categories of SMEs (service and trade). However, the results of these studies will not change the results of the study in manufacturing SMEs; rather it will provide more information on the influence of employees' participation on other SMEs categories. Also, it is important to conduct a study on factors that can moderate the relationship between employees' participation and IWB.

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