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EDITORIAL NOTE

This is the fourth volume, first issue of the Pan-African Journal of Business Management (PAJBM) hosted at the Faculty of Business Management at the Open University of Tanzania. This issue includes articles covering Competitive Aggressiveness and Export Performance, Macroeconomic Factors on Fiscal Policy Stance and Public Expenditure, Job Satisfaction Organizational Affective Commitment and Turnover Intentions, The Effect of Marketing Capabilities on Small and Medium Enterprises' Performance, The Dimensionality of Entrepreneurial Orientation in the Hospitality Industry, Effect of Word-of-Mouth Dimensions on Brand Loyalty, and The Influence of Training Participation on Employee Performance and Employee Intention to Leave. All areas are of interest to scholars in Africa. The researchers in this issue deal with conditions in Tanzania, Kenya, Rwanda and Ghana.

The Editorial Board hopes that the readers will find the articles useful and contribute to the academic knowledge in the respective areas.

Prof. Jan-Erik Jaensson
Chief Editor

General information
The Journal is produced by the Faculty of Business Management at The Open University of Tanzania. It will accept theoretical, conceptual and research-based papers in a wide range of topics on business management concerning Africa. It also accepts cases, book reviews and summaries of dissertations.

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Relationship Between Competitive Aggressiveness and Export Performance of Tourism Firms in Tanzania: The Role of Organizational Structure

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Abstract: *This study assesses the relationship between competitive aggressiveness and export performance of firms operating in the tourism sector of Tanzania. The organizational structure was used to assess the type of structure, which better provides a facilitative condition for the relationship. The study utilized primary data collected from randomly selected 202 firms operating in the tourism sector in Arusha, Dar es Salaam and Zanzibar. SmartPLS-3 software was used as an analytical tool using the Partial Least Square Structural Equation Modeling (PLS-SEM) technique. Empirical findings suggest a strong and positive relationship between competitive aggressiveness and export performance. Further results from Multi-group moderation analysis show a lack of significant differences between mechanistic and organic firms in terms of competitive aggressiveness and export performance relationships. Contrary to the structural contingency theory, the study concludes that competitive aggressiveness is beneficial to all types of tourism firms regardless of the kind of organizational structure they adopt.*

Keywords: Competitive Aggressiveness, Export Performance Multi-Group Moderation, Firm Structure

Introduction

International markets are predominantly competitive, and exporters need to compete aggressively to the best of their capability (Monteiro, Soares and Rua 2017). Competitive aggressiveness, which emanates from the Entrepreneurial Orientation theory, is based on rival-focused actions undertaken by both small and large firms to agitate competitors. It involves the company's tendency to challenge direct and intensely its competitors when entering into a market to enhance its position in outperforming its rivals (Oliveira, 2015). According to Stambaugh, Yu and Dubinsky (2011), competitive aggressiveness involves forestalling the competitor's line of attack through a competitive move or reacting to the competitors' aggressive actions. DeepaBabu and Manalel (2016) add that a firm's competitive aggressiveness can be recognized by its readiness to be unconventional rather than relying on systematic methods of competing. The degree of aggressiveness reflects the decision-makers' desire, capacity and determination to promote the firm's exports. Accordingly, Lumpkin and Dess (2001) argue that

competitive aggressiveness demonstrates the amount of a firm's efforts to outdo competitors and that firms in hostile environments are more likely to benefit from competitive aggressiveness. Aigboje (2018) argues that for firms to keep up with the pace of technology, they tend to be more aggressively competitive by actively challenging their competitors to get themselves ahead of the race. According to Chen, Katila, McDonald and Eisenhardt (2010), firms are challenged through hostile price competition, innovation and aggressive marketing campaigns. They add that aggressively competitive firms prefer to undertake competitive actions such as product launches, marketing campaigns and price competition more frequently than competitors.

Exporting firms operating in the tourism industry contribute massively to the national economy. Still, they are relatively more exposed to competition pressure given the nature of service delivery, which is more information technology-based when compared to physical goods. Tourism is considered to be the world's largest industry and generates revenues that support a significant proportion of the economies of many nations. Also, it contributes massively to millions of employment opportunities (Farkhondehzadeh, Karim, Jamshid Azizi and Hatami 2013). Kumasaru and Kumara (2016) assert that the tourism sector has a multiplier effect on the local community. Besides, tourism generates employment and the government's revenue through tax and foreign exchange earnings (Jaensson and Uiso, 2015). For seven consecutive years from 2011, tourism's direct growth outpaced global economic growth (World Travel and Tourism Council, 2018). In Tanzania, the direct contribution of tourism to GDP was TZS 4,405.7 billion (USD 1,975.9 million), which was 3.8% of the total GDP in 2017 and was projected to rise by 7.2% p.a from 2018 to 2028 (World Travel and Tourism Council, 2018). This progress calls for companies and businesses engaging in tourism to become more competitively aggressive than ever in serving their markets.

The need for studying the relationship between competitive aggressiveness and export performance of Tanzanian tourism service exporters stems from the fact that the country's business environment is full of challenges. It is faced with weak market support institutions, underdeveloped supply industries and low levels of domestic competition (Hansen, Langevan, Rutashobya and Urassa 2015). Accordingly, Milanzi (2012) argues that Tanzanian companies are significantly hampered with a lack of export knowledge and information, lack of strategic resources to undertake export operations, limited finance, and poor infrastructure. As a result, Tanzanian exporting firms fail to meet international market requirements as they internationalize in response to home-market weaknesses instead of home market strength hence poor export performance (Milanzi, 2012).

The literature on export performance significantly gave little attention to competitive aggressiveness as among the influencing factors that are internal to the firm. Most export performance literature consider structural transformation, market access, liberalization and service sectors, removal of trade-distorting domestic support as some of the efforts that could alleviate export challenges by firms from developing countries (UNCTAD, 2005). What is less attended are the factors internal to the firm, such as the ability to aggressively compete in the marketplace that can substantively explain export performance. Consequently, Rua and Franca (2006) used three dimensions of entrepreneurial orientation, namely innovation, risk-taking and Proactiveness and linked them to export performance without taking onboard competitive

aggressiveness. Also, previous studies on competitive aggressiveness gave little or no focus on the role of company structure in explaining the strength and nature of the relationship between competitive aggressiveness and tourism firms' export performance. This study, therefore, examines this relationship while applying the type of organizational structure (mechanistic vs. organic) as a moderating variable. Unlike previous studies such as Ferrier (2001), Franca and Rua (2016); Freiling and Schelhowe (2014); Kuivalainen, Sundqvist, and Servais (2007); and Taylor (2013) the current study aims to recommend the appropriate type of organizational structure that should be implemented by tourism firms to further the benefit reaped as a result of being aggressively competitive. Literature on the relationship between competitive aggressiveness and export performance is scanty as most studies focused on business performance in general with little or no specific focus to export and tourism. Okangi and Letmathe (2015) report a lack of significant adoption of competitive aggressiveness among Tanzanian firms.

Literature Review

Competitive Aggressiveness and Export Performance

The Entrepreneurial Orientation theory considers competitive aggressiveness as one of the dimensions that explain the firm's predisposition towards outperforming rivals. It involves the willingness to attack rivals to improve and defend its share or profit position in its industry through the creation of business practices that directly target rival firms (Stambaugh, Lumpkin, Brigham and Cogliser, 2017). Chen (1996) identifies three drivers for competitive aggressiveness, which are awareness, motivation, and capability. Awareness is concerned with the firm's tendency to search for competitor's information about their competitive actions, whereas motivation entails the eagerness to outperform rivals. Capacity, on the other hand, is concerned with the ability and readiness to deploy resources for competitive attacks. Given the audacity of competitively aggressive firms, several studies have demonstrated a consensus that competitive aggressiveness has a positive relationship with export performance (Ferrier, (2001); Franca and Rua, 2016; Freiling and Schelhowe, 2014; Kuivalainen et al., 2007; Taylor, 2013). Also, organizational profitability was suggested by Aigboje (2018) to relate to competitive aggressiveness positively. To flee from generalization, the current study focuses on sectoral analysis, particularly the tourism sector of a developing country intending to find out how the relationship behaves hence making it reasonable to propose the first hypothesis as:

H1: There is a significant positive relationship between competitive aggressiveness and export performance of tourism firms

The Contingencies of Competitive Aggressiveness

Extant studies on competitive aggressiveness have pointed out various contingencies of competitive aggressiveness. However, the role of organizational structure in shaping the relationship between competitive aggressiveness and export performance is much neglected. For instance, Ferrier (2001) suggests that competitive aggressiveness actions are influenced by top management team heterogeneity, past performance, slack, and industry characteristics. Kljucnikov, Belas, and Smrcka (2016) point out gender and education as among the influences of competitive aggressiveness. They argue that male and higher educated managers are relatively

more aggressive against competitors and call upon entrepreneurial oriented companies to include these types of team members in their management. In addition, specialized technological resources and support from a dense network of alliance partners, according to Andrevski and Ferrier (2016), are factors that make firms benefit more from competitive aggressiveness.

In order to ascertain the interplay between organizational structure, competitive aggressiveness and export performance, the structural contingency theory can be used. The theory holds that there is "no one best way," meaning that no single structure or structural type which is optimal for all organizations. Instead, the most effective structure is one that fits certain factors, called contingencies. It is therefore essential to moderate the relationship between competitive aggressiveness and export performance using structural contingency theory. By so doing, the ideal firm structure where competitive aggressiveness is more beneficial can be determined. Burns and Stalker (1961) as cited by Sine, Mitsuhashi and Kirsch (2006) propose two types of firm structure, namely organic and mechanistic. Literature suggests that organic structures are characterized by a higher degree of task interdependence, greater decentralization of control and authority, and horizontal communication (Shaw, 2014 and Lunenburg, 2012). Accordingly, Őnday (2016) and Shoghi and Safieepoor (2013) argue that this type of structure is useful when the environment in which an organization operates is highly uncertain, unstable or likely to undergo rapid changes in market conditions. Hence the term "organic" suggests that, like living things, organizations change their structures, roles, and processes to respond and adapt to their environments. Beamish, Karavis, Goerzen, and Lane (1999) found that the type of organizational structure within which a firm manages its exports has a significant impact on export revenues.

On the other hand, the mechanistic form of organizational structure works best in stable environments by performing routine activities through standard procedures while under an unstable environment, the organic form of organizations has more advantages because of its structural flexibility and ability to adapt to change. Since mechanistic firm structures work best in stable environments, it implies the presence of a weak correlation between competitive aggressiveness and export performance as the export businesses operate under turbulent and very dynamic environment (Shaw, 2014).

Reflecting on the above arguments, it is, therefore, correct to suggest the presence of a strong positive relationship between competitive aggressiveness and export performance in organic firms than in mechanistic firms; hence the following hypothesis is proposed:

H2: The positive relationship between competitive aggressiveness and export performance is stronger in organic firms than in mechanistic firms

Conceptual Framework

After reviewing the literature and formulated hypotheses, a conceptual framework was constructed as a model to guide hypothesis testing. Hence Figure 1 presents the relationships in terms of hypotheses that were tested.

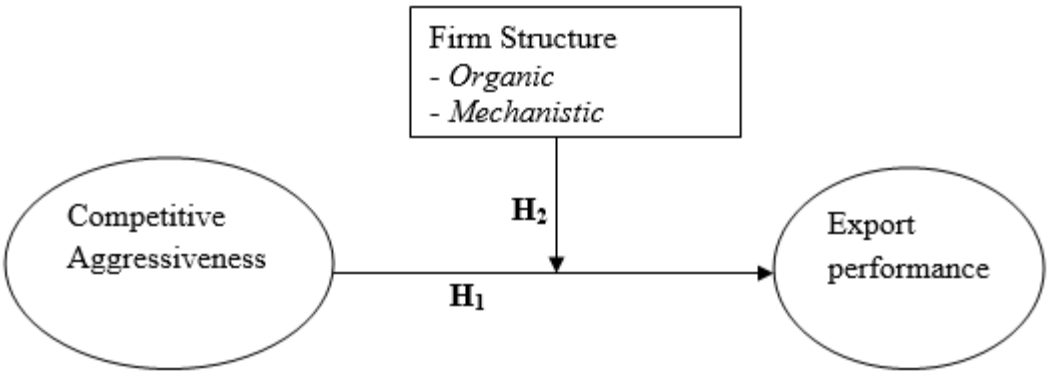


Figure 1. Conceptual Framework

Methodology

Sampling and Data Collection

This study follows explanatory design using primary data collected from randomly selected 202 firms operating in the tourism sector from selected areas of Tanzania, namely Arusha, Dar es Salaam and Zanzibar. The study areas were preferred due to their strategic importance to Tanzania's tourism industry as they host a large number of tourism firms (Shayo, 2018). The companies involved were tour guide operators, tourist hotels, air charter operators, campsites and travel agents who operate in the selected study area. A structured questionnaire was used as a tool for data collection.

A list containing addresses of 1,194 firms was extracted from the database of Tanzania's Ministry of Tourism and Natural Resources. From the list, 424 firms were operating within the study area, thus formed the sampling frame of the study. Using Yamane formula (1967) for sample size determination;

$$n = N/ \{1+N (e)^2\}$$

Where n = Sample size; N = is the targeted study population; e = margin of error (0.05), a sample of 202 firms was obtained. Finally, systematic random sampling was used to draw 202 firms out of the 424 firms in the sampling frame. From each firm, one key informant (Owner manager, CEO or senior manager) was purposively selected to answer the structured questionnaire through self-administration.

Variables and Measurements Procedure

Export performance (endogenous variable) was measured by the multi-dimensional EXPERF scale, self-evaluation using composite subjective measures as adopted from Zou, Taylor and Osland, (1998). The scale is composed of three sub-dimensions—the first being financial export performance, which includes export profits, export sales and export sales growth. The second

sub-dimension is the strategic export performance, which is made up of contribution of the export venture to a firm's competitiveness, strategic position and market share. The third sub-dimension is perceived satisfaction with export performance, which includes the perceived success of the venture, satisfaction with the venture and degree to which the enterprise is meeting expectations. The three sub-dimensions formed a single composite measure with nine indicators for export performance (EP). Carneiro, Da Rocha, and Da Silva, (2007), single out the work of Zou *et al.* (1998) as representative of the best efforts in the measurement of export performance. Sousa *et al.* (2008) support the use of the subjective EXPERF scale as it provides the general perception of export performance because it translates the perceived degree of economic success as well as managers' opinions on the strategic success. The subjective performance measure is appropriate in situations where managers may be unwilling or unable to supply objective financial data. The subjective EXPERF composite scale has been used by other researchers such as Okpara (2013) and Spasova (2014).

The measure of competitive aggressiveness (exogenous variable) was adapted from Lumpkin and Dess (1996) by customizing it to fit the Tanzanian socio-economic context. The measure consists of five indicator items. These indicator items included the degree to which the firm adopts an aggressive competitive stance in the export markets, the degree to which the firm actively challenges export competitors to achieve competitive goals, and the degree to which the firm takes responsive reaction against the competitors' actions. Other items were the degree to which the firm sets high export competitive targets as well as the extent to which the firm targets the export competitors' weaknesses. Respondents rated each item on a Likert-like scale with five (5) anchors ranging from 1 (strongly disagree) to 5 (strongly agree).

The moderating variables in the model are the two types of firm structure (organic and mechanistic structures). In order to determine whether a firm's structure was organic or mechanistic, seven (7) items for measuring firm organicity were adopted from Meijaard, Brand, and Mosselman (2005). The response format for the items was pre-defined, ranging from 1 (strongly disagree) to 5 (strongly agree), with the middle value of 3 indicating firms that are ambidextrous (uses both Organic and Mechanistic structures). To create a categorical scale for multigroup analysis, summated scores using the SPSS transformation menu for the organicity scale was used to determine the type of organizational structure. From this procedure, firms that scored less than three from the summated scale were organic and were coded as 1 in the SPSS data file. Those which scored more than three were mechanistic and were coded as 2, whereas ambidextrous firms scored exactly three and were coded as 3 in the SPSS data file. It should be noted that some organizations, according to Turner, Swart, Maylor, and Antonacopoulou (2016), make use of both mechanistic (explicit tools and processes) together with the organic flexibility to respond to immediate issues. In this study, seven (7) firms were ambidextrous, i.e., both organic and mechanistic, hence were excluded from all subsequent analyses.

Data Analysis

The IBM SPSS Statistics version 22 was used in the descriptive analysis of the demographic characteristics of the respondents. Secondly, the Partial Least Square Structural Equation

Modeling through SmartPLS-3 software was used in analyzing the outer and inner models to examine the relationship between competitive aggressiveness and the Tanzanian tourism firms' export performance. It was further used to establish whether significant differences exist in the relationships between firms that operate under organic structures and those which operate under mechanistic structures through Multigroup Moderation Analysis (MGA).

PLS Measurement (outer) Model

Latan and Noonan (2017) insist on the importance of ensuring that the specified measurement (or outer) model possesses the minimum required properties of acceptable reliability and validity, short of which the structural (inner) model estimates become worthless. That is to say; the outer measurement model must demonstrate acceptable levels of reliability and validity as a necessary condition to proceed to the assessment of the inner structural model.

In this study, PLS measurement models comprised competitive aggressiveness dimension with five (5) reflective indicators and export performance dimension which consist of three sub-dimensions namely satisfaction with export performance (SWP), Financial export performance (FEP) and Strategic export performance (SEP) as per Zou *et al.* (1998). The three sub-dimensions were aggregated to form a single composite measure with nine indicators for export performance (EP). Both endogenous and exogenous reflective constructs were specified (and the measurement models for both were evaluated.

Measurement models were first assessed for significance and size of outer loadings, where according to Hair *et al.* (2017), a standardized outer loading of 0.70 or above is thought to be sufficient. The next move was to evaluate composite reliability (CR), where a value within a range of 0.70 – 0.90 indicates satisfactory internal consistency reliability of a construct. Lastly, convergent validity through Average Variance Extracted (AVE) and discriminant validity through heterotrait-monotrait ratio (HTMT) and Fornell-Larcker Criterion were estimated. The values of AVE above 0.5 indicate achievement of convergent validity. Heterotrait-monotrait ratio of correlations (HTMT) threshold of 0.85 was considered a good discriminant validity level (Hair *et al.*, 2017). In addition, under Fornell-Larcker Criterion, the square root of AVE for each construct should be higher than the correlation among variables.

PLS Structural Model

Assessment of significance level (*p-value*), Predictive Relevance (Stone-Geisser's (Q^2), Coefficient of Determination (R^2), Effect Sizes (f^2), and significance of structural model relationships through bootstrapping procedure were used to test the two hypotheses. Hair *et al.* (2017) provide rules of thumbs, where *p*-value of less than 0.05 indicates a significant relationship at 5%, and a larger path coefficient indicates relatively greater effect of a particular exogenous variable on the endogenous latent variable. Further, R^2 values of 0.75, 0.50 and 0.25 for endogenous latent variables indicate respective substantial, moderate, or weak predictive power of a model. R^2 values indicate the percentage of variability accounted for by the predecessor (exogenous) constructs in the model. The acceptable amount of effect size (f^2) is suggested by Cohen 1988) that values of 0.02, 0.15, and 0.35 respectively represent small, medium and large effects. A value below 0.02 indicates that the exogenous variable lacks a sufficient effect on the endogenous construct.

Multi-group Moderation

Hypotheses testing involved testing of moderation effects to see whether or not the type of organizational structure (Organic vs. Mechanistic) affected the relationships between tourism firm's competitive aggressiveness and export performance. Multigroup Analysis (PLS-MGA), which examines whether there are significant differences between groups-specific path coefficients were used to test the second hypothesis.

Results and Discussion

Out of 202 firms that were involved in the study, ninety-two (92) firms were found to be mechanistic, while 103 were organic in terms of organizational structure. Seven (7) firms were ambidextrous, i.e., both organic and mechanistic, thus were excluded from all subsequent analyses. Three levels of analyses were conducted. The first analysis, as suggested by Latan and Noonan (2017), was to assess the specified measurement (or outer) model to ensure it possesses the minimum required properties. The second analysis was based on testing the direct relationship between the competitive aggressiveness and export performance, i.e., analysis of the inner (Structural) model. The third was Partial Least Square multigroup moderation analysis (PLS-MGA) to test group differences between the two types of organizational structure in terms of which one provides a supportive environment for the relationship between competitive aggressiveness and export performance.

Results from the Assessment of the Measurement (Outer) Model

The results of the measurement model are shown in Table 1. The model fit measures suggest an acceptable fit. The outer model comprised of the competitive aggressiveness as a latent variable with five reflective indicators and export performance, which comprised three sub-dimensions, namely satisfaction with export performance (SWP), financial export performance (FEP) and strategic export performance (SEP). Using SmartPLS-3 software, all outer loadings were above 0.7 and significant at $p < .001$, as suggested by Hair *et al.* (2017). Indicator t-values from the bootstrapping process ranged from 15.295 to 64.418 (recommended minimum t-value is 1.96). It was further found out that all of the indicators had individual indicator reliability values that are much larger than the minimum acceptable level of 0.4 and close to the ideal level of 0.7, as proposed by Kwong and Wong (2013).

The Heterotrait-Monotrait ratio of correlations (HTMT) for discriminant validity measure was 0.609, which meets the acceptable minimum level of 0.5, according to Hair *et al.* (2017). In addition, there were no cases of cross-loadings hence confirming the presence of discriminant validity. Composite reliability values were 0.927 and 0.948 for competitive aggressiveness and export performance respectively. The average variance extracted (AVE) values were 0.717 and 0.669 for competitive aggressiveness and export performance respectively. These findings suggest that the measurement models met the entire requirement hence paving the way for analysis of the structural/inner model.

Table 1. Results Summary for the Measurement/Outer Models

Path	Factor Loadings (λ)	Indicator Reliability (λ^2)	T-Statistics	P -Values	Comp reliability	AVE	HTMT
AG1 <- Comp Aggressiveness	0.717	0.514	15.295	0.000	0.927	0.717	0.609
AG2 <- Comp Aggressiveness	0.903	0.815	44.530	0.000			
AG3 <- Comp Aggressiveness	0.877	0.769	25.771	0.000			
AG4 <- Comp Aggressiveness	0.877	0.769	38.668	0.000			
AG5 <- Comp Aggressiveness	0.848	0.719	41.613	0.000			
FEP1 <- Export Perf	0.819	0.670	19.601	0.000	0.948	0.669	
FEP2 <- Export Perf	0.789	0.623	17.233	0.000			
FEP3 <- Export Perf	0.834	0.696	22.253	0.000			
SEP_1 <- Export Perf	0.762	0.581	21.505	0.000			
SEP_2 <- Export Perf	0.918	0.843	64.418	0.000			
SEP_3 <- Export Perf	0.777	0.604	21.622	0.000			
SWP1 <- Export Perf	0.842	0.709	35.495	0.000			
SWP2 <- Export Perf	0.779	0.607	32.652	0.000			
SWP3 <- Export Perf	0.831	0.691	35.537	0.000			

To confirm further the discriminant validity, the Fornell and Larcker criterion was used to check whether the square root of AVE for each construct is higher than the correlation between the underlying constructs. As suggested by Ab-Hamid, Sami and Sidek (2017), discriminant validity can be accepted for this measurement model as the square root of AVE for the constructs is 0.847 and 0.818 for competitive aggressiveness and export performance respectively which is higher than the correlation between the two constructs (0.585). Table 2 summarizes the findings from Fornell and Larcker discriminate validity test.

Table 2. Fornell and Larcker Discriminant Validity

	Comp Aggressiveness	Export Performance
Comp Aggressiveness	0.847	
Export Perf	0.585	0.818

Results from Assessment of the Structural/Inner Model

Analysis of the structural model revealed a strong and significant relationship between competitive aggressiveness and overall export performance measured (using a composite scale of nine items) with a path coefficient of 0.585, significant at $p < .001$ (Figure 2). The effect size value (f^2) was 0.521, whereas the coefficient of determination (R^2) value was 0.343. In addition, the bootstrapping (t-statistic) result between the two variables was 11.133, indicating a significant relationship between the two. Predictive relevance Q^2 value was 0.204, which indicates a moderate effect. Q^2 value greater than zero is indicative of whether the endogenous construct can be predicted (Hair *et al.* 2017). With these findings, hypothesis H_1 is supported that there is a significant positive relationship between competitive aggressiveness and export performance.

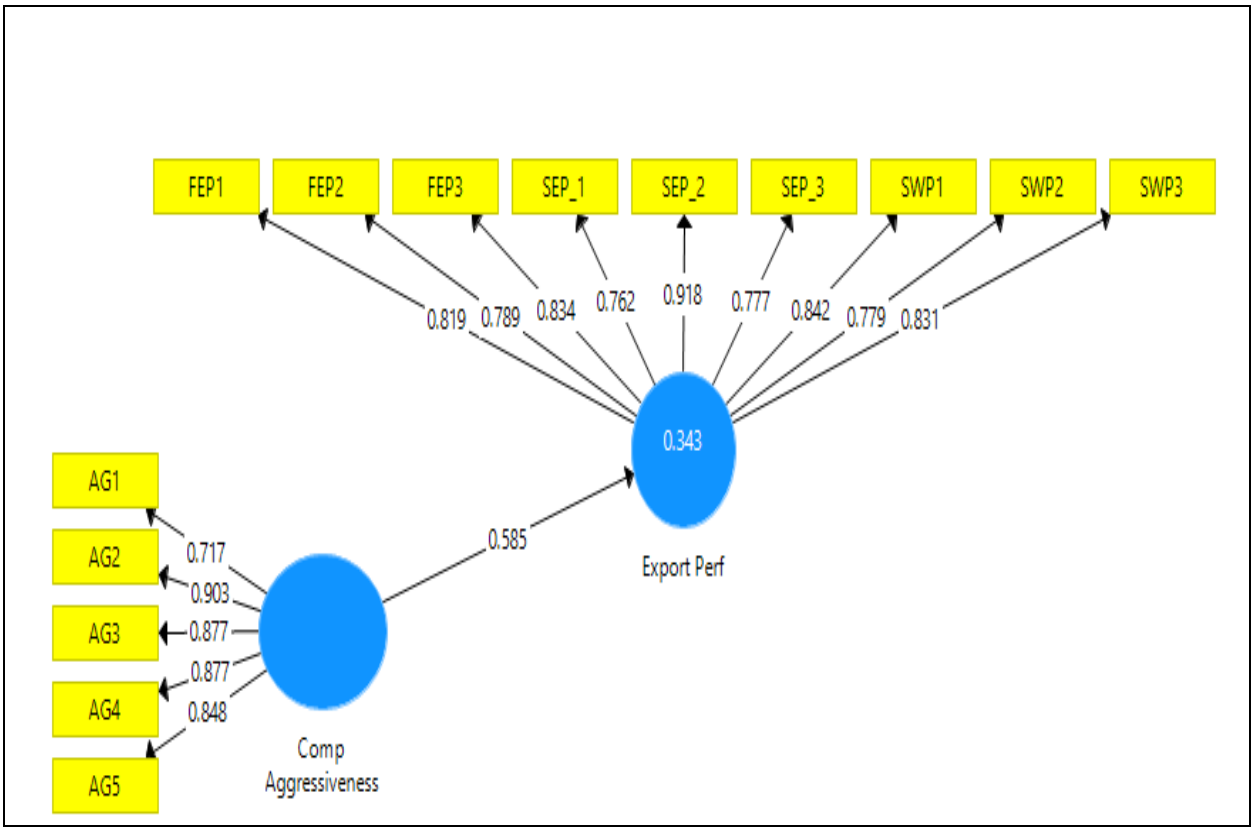


Figure 2. Results from the Assessment of Structural/Inner Model

Results from Multi-group Moderation Analysis

The second series of analyses (multi-group moderation analyses - MGA) was carried out in order to test the second hypothesis that the positive relationship between competitive aggressiveness and export performance is more pronounced in organic firms than in mechanistic firms, In doing this, two data groups were formed; one for organic firms with 103 respondents' firms and the other for mechanistic firms with 92 respondents firms. Multi-group moderation analysis (MGA) through SmartPLS-3 was run using 5000 subsamples. The aim was to assess which type of firm structure among the two provides a more conducive environment for firms to benefit from being competitively aggressive in the export markets, i.e., where the relationship between competitive aggressiveness and export performance becomes stronger. Table 3 shows bootstrapping results across the two groups for the initial calculation using 5000 subsamples.

Table 3. Bootstrapping results across groups (Comp Aggressiveness -> Export Perf)

	Path coeff - Original sample (O)	Path coeff - Sample Mean (M)	Standard Deviation (STDEV)	T statistics (O/STDEV)	p-Values
Complete	0.585	0.592	0.052	11.239	0.000
Mechanistic	0.615	0.619	0.099	6.242	0.000
Organic	0.334	0.380	0.136	2.456	0.014

Results from Table 3 indicate that the relationship between competitive aggressiveness and export performance was significant and positive in both mechanistic and organic firms with t-values of 6.242 and 2.456 respectively. The p-values were also significant in both types of organizational structure, i.e., $p < .001$ and $p = 0.014$ for mechanistic and organic structures respectively. One may recall that the same results were for the overall/complete model; hence there is no difference between the two types of firm structure.

To confirm further the results, Parametric Test which assumes equal variances across groups and the Welch- Satterthwait Test that assumes unequal variances between groups were conducted as suggested by Barajas-Portas, Artigas, Fernández and Alarcón (2017). Both tests showed no significant difference between mechanistic and organic firms in terms of the relationship between competitive aggressiveness and export performance (Table 4). The type of organizational structure, therefore, does not moderate the relationship between competitive aggressiveness and tourism firm's export performance. Hence hypothesis H_2 that the relationship between competitive aggressiveness and export performance is stronger in organic firms than in mechanistic firms is rejected. The results show a significant positive relationship in both types of firms, i.e., no differences in both direction and significance levels. These findings deviate from the structural contingency theory, which suggests the presence of variations among the two types of organizational structures. The current study's deviation could be explained by the argument by Kuivalainen *et al.* (2007) that all firms operating globally possess qualities of competitive aggressiveness, indicating that regardless of the type of organizational structure, they are likely to drive export performance.

Table 4. PLS-MGA Difference Test Results

	Path Coefficients-diff (Mech - Organic)	t-Value (Mechanistic vs. Organic)	p-Value (Mechanistic vs. Organic)	Strength of difference
Parametric test	0.282	1.659	0.099	Non-significant
Welch-Satterthwait test	0.282	1.688	0.095	Non-significant

Conclusion

Findings from this study suggest that organizational structure does not moderate the relationship between competitive aggressiveness and export performance. Thus, it is evident from the findings that being competitively aggressive is beneficial to all exporting tourism firms regardless of their types of organizational structures. This has been demonstrated by the multi-group moderation results, which were found to be positive and significant in both types of organizational structures. These findings are contrary to the structural contingency theory, which suggests differences between mechanistic and organic firms as far as competitive aggressiveness and export performance are concerned. Besides, these results provide flexibility to the management of exporting firms as they could henceforth implement competitive export strategy independent of the type of organizational structure they possess. The current study has provided empirical evidence of the influence of competitive aggressiveness on export performance. Consequently, the findings could stimulate Tanzanian tourist firms to adopt competitive aggressiveness as previous studies such as Okangi and Letmathe (2015) suggest a lack of significant adoption of the same.

Recommendations for Future Studies

Future studies could look into other organizational variables, such as the moderating effect of type of leadership style on the relationship between competitive aggressiveness and export performance. Secondly, the current study did not consider demographic variables such as firm size, age and experience as antecedents of export performance. Future studies, therefore, could look into the extent to which these factors may influence the relationships between competitive aggressiveness and export performance. In addition, future studies could look into the extent to which the remaining four dimensions of entrepreneurial orientation, namely risk-taking, employee autonomy, proactiveness and innovativeness, influence export performance of tourism firms.

References

Ab-Hamid, M. R., Sami, W., and Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell and Larcker criterion versus HTMT criterion. *Journal of Physics: Conference Series. 890* (1), 1 – 5.

Aigboje, P.O. (2018). Competitive aggressiveness and organizational profitability of hotels in Port Harcourt, Nigeria. *International Journal of Social Sciences and Management Research. 4*(5), 37 – 44.

Andrevski, G. & Ferrier, W.J. (2016). Does it pay to compete aggressively? Contingent roles of internal and external resources. *Journal of Management. 20* (10), 1–25

Barajas-Portas, K., Artigas, E. M., Fernández, L. V., and Alarcón, C. N. (2017). Understanding corporate reputation through satisfaction in emerging markets. *International Journal of Sales, Retailing & Marketing*. *6*(2), 17-30.

Beamish, P.W., Karavis, L., Goerzen, A., and Lane, C. (1999). The relationship between organizational structure and export performance. *Management International Review. 39* (1)

Carneiro, J. Da Rocha, A., & Da Silva, J.F. (2007). Critical analysis of measurement models of export performance. *Brazilian Administrative Review. 4*(2), *1 – 19.*

Chen, E.L., Katila R., McDonald, R. & Eisenhardt, K. M. (2010). Life in the fast lane: Origins of competitive interaction in new vs. established markets. *Journal of Strategic Management*. *31*(13), 1527–1547.

Chen, M. (1996). Competitor analysis and inter-firm rivalry: Toward a theoretical integration. *Academy of Management Review, 21*(1), 100-134.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Mahwah, NJ: Erlbaum.

DeepaBabu, K.G and Manalel, J. (2016). Entrepreneurial orientation and firm performance: A critical examination. *Journal of Business and Management*. *18*(4), 21-28.

Ferrier W.J. (2001). Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *The Academy of Management Journal. 44*(4), 858-877

Farkhondehzadeh, A., Robat Karim, M. R., Roshanfekr, M., Azizi, J., & Legha Hatami, F. (2013). E-Tourism: The role of ICT in the tourism industry. *European Online Journal of Natural and Social Sciences*. *2*(3), 566 – 573.

França, A. S., & Rua, O. L. (2016). Influence of entrepreneurial orientation and absorptive capacities in export performance. *Tourism & Management Studies*. *12*(1), 196-202.

Freiling, J., & Lütke Schelhowe, C. (2014). The impact of entrepreneurial orientation on the performance and speed of internationalization. *Journal of Entrepreneurship, Management and Innovation*. *10*(4), 169 - 199.

Hair, J., Hult, G., Ringle, C. and Sarstedt, M. (2017). *A Primer in Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed. Sage Publication, Los Angeles.

Hansen, M.W., Langevan, T., Rutashobya, L., and Urassa, G. (2015). Coping with the African Business Environment: Strategic response under market and institutional uncertainty in the Tanzanian food processing industry. *CBDS Working Paper Series, 24.*

Jaensson, J.E. & Uiso, H. (2015). Assessing the link between market orientation and Poverty reduction in the tourism industry: The case of Tanzania. *International Journal of Business Tourism and Applied Sciences. 3* (1), 57 – 64.

Kljucnikov, A., Belas, J., Smrcka, l. (2016). The role of risk-taking and competitive aggressiveness in the management of SMEs. *Polish Journal of Management Studies. 14* (1), 129 - 139

Kuivalainen, O., Sundqvist, S. & Servais, P. (2007). Firms‘ degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business. 42*(3), 253 – 267.

Kumasaru, J. and Kumara, A. (2016). Impact of Entrepreneurial Orientation on Entrepreneurial Performance of Tourism Enterprises – A Study with reference to Southern Province of Sri Lanka. *Amity Journal of Entrepreneurship. 1*(2), 34-43.

Kwong, K. & Wong, K. (2013). Partial least squares structural equation modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin. 24.*

Latan, H., & Noonan, R. (Eds). *(2017). Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*. Switzerland, Springer International Publishing.

Lumpkin, G.T., and Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of Environment and industry life cycle. *Journal of Business Venturing, 16,* 429–451.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*. *21*(1), 135-172.

Lunenburg, F.C. (2012). Mechanistic-organic organizations—an axiomatic theory: authority based on bureaucracy or professional norms. *International Journal of Scholarly Academic Intellectual Diversity. 14* (1).

Meijaard, J., Brand, M. J. and Mosselman, M. (2005). Organizational structure and performance in Dutch small firms. *Journal of Small Business Economics. 25*(1), 83-96.

Milanzi, M.A. (2012). The impact of barriers on export behavior of a developing country firm: Evidence from Tanzania. *International Journal of Business and Management. 7*(3), 10 -21.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science. 29* (7).770-791.

Monteiro, A.P., Soares, A.M. and Rua, O.L. (2017). Entrepreneurial orientation and export performance: the mediating effect of organizational resources and dynamic capabilities. *Journal of International Business and Entrepreneurship Development*. *10*(1), 3–20.

Okpara, J. O. (2013). Entrepreneurial orientation and export performance: evidence from an emergent economy. *Journal of International Business and Cultural Studies.* 1 – 10.

Oliveira A.B. (2015). The Aggressive Competitiveness Influence on the Retailer Company Performance. *Future studies research journal: Trends and strategies.* 7, 156 – 183.

Őnday, Ő. (2016). Modern structural organization theory: from mechanistic vs. organic systems of burns & stalker to technology of Burton & Obel. Global Journal of Human Resource Management. *4*(2), 30-46.

Shaw, M. (2014). Organization theory and societal culture. *Emerging Leadership Journeys, 7* (1), 1-9.

Shayo, F. A. (2018). Effect of entrepreneurial orientation on the Tanzanian firms export performance: The moderating role of firm structure. Thesis for the award of Ph.D. at the Open University of Tanzania. pp30.

Shoghi, B., and Safieepoor, A. (2013). The effects of organizational structure on the entrepreneurial orientation of the employees. *International Journal of Academic Research in Business and Social Sciences*. *3*(1), 90 – 100.

Sine, W. D., Mitsuhashi, H., & Kirsch, D. A. (2006). Revisiting Burns and Stalker: Formal structure and new venture performance in emerging economic sectors. *Academy of management journal*. *49*(1), 121-132.

Stambaugh, J.E., Lumpkin, G.T., Brigham, K & Cogliser, C. (2017). What makes some firms more competitively aggressive than others? Evidence from the banking industry. *Academy of Management Proceedings. 1*, 1 – 6.

Stambaugh, J.E., Yu, A., & Dubinsky, A.J. (2011). Before the attack: A typology of strategies for competitive aggressiveness. *Journal of Management, Policy and Practice. 12*(1), 49 - 63

Sousa, C. M. P., Martínez-López, F. J., and Coelho, F. (2008). The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Reviews*. 10, 343-374.

Spasova, E. (2014). Determinants and measures of export performance – a comprehensive literature review. *Journal of Contemporary Economic and Business Issues. 1*(1), 63 – 74.

Taylor, P. (2013). The effect of entrepreneurial orientation on the internationalization of SMEs in developing countries. *African Journal of Business Management.7*(19), 1927-1937.

Teixeira, R., Koufteros, X. and Peng, X. (2012). Organizational Structure, Integration, and Manufacturing Performance: A Conceptual Model and Propositions. *Journal of Operations and Supply Chain Management. 5*(1), 69 – 81.

Turner, N., Swart, J., Maylor, H., and Antonacopoulou, E. (2016). Making it happen: How managerial actions enable project-based ambidexterity. *Management Learning*. *47*(2), 199–222.

Welter, F., and Smallborne, D. (2011). An institutional perspective on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*. *49(1):* 107–125.

World Travel & Tourism Council (2018). The economic impact of global travel & tourism – Tanzania, *Report.*

UNCTAD (2005). Determinants of export performance: Developing countries in international trade. *Trade and Development Index*. 47 – 73

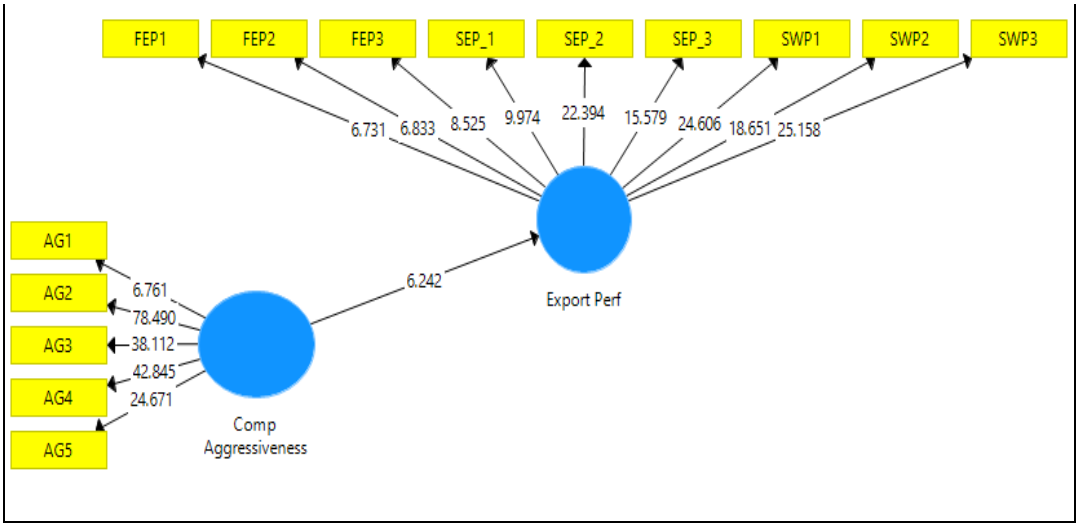
Yamane, T. (1967). *Statistics. An Introduction Analysis, 2nd Ed*., New York; Hamper and Row

Zou, S., Taylor, C. R., and Osland, G. E. (1998). The EXPERF Scale: a cross-national generalized export performance measure. *Journal of International Marketing. 6*(3), 37-58.

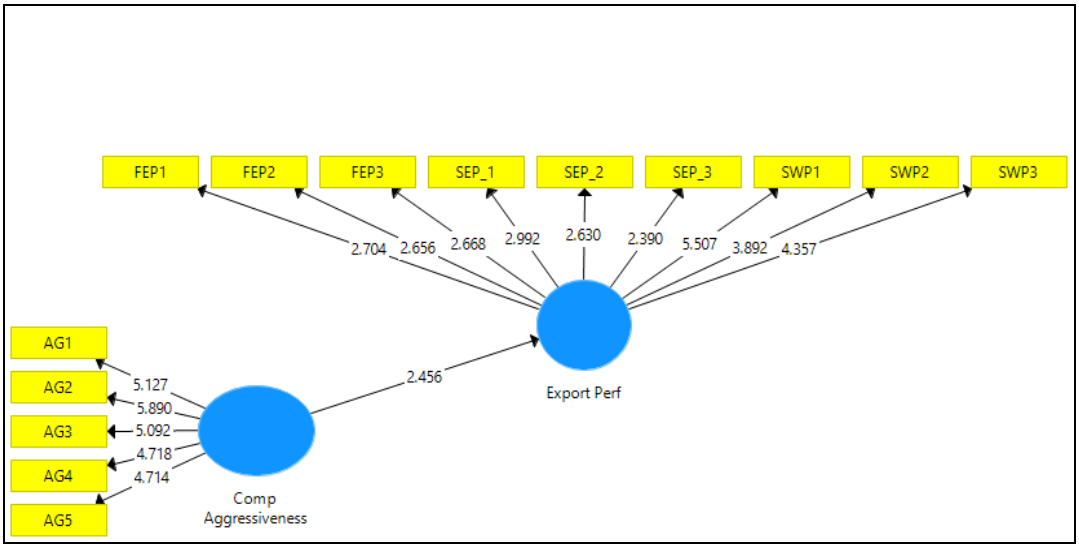
APPENDIX 1: Predictive Relevance (Q^2)

	SSO	SSE	Q^2 (=1-SSE/SSO)
Comp Aggressiveness	975.000	975.000	
Export Perf	1,755.000	1,397.377	0.204

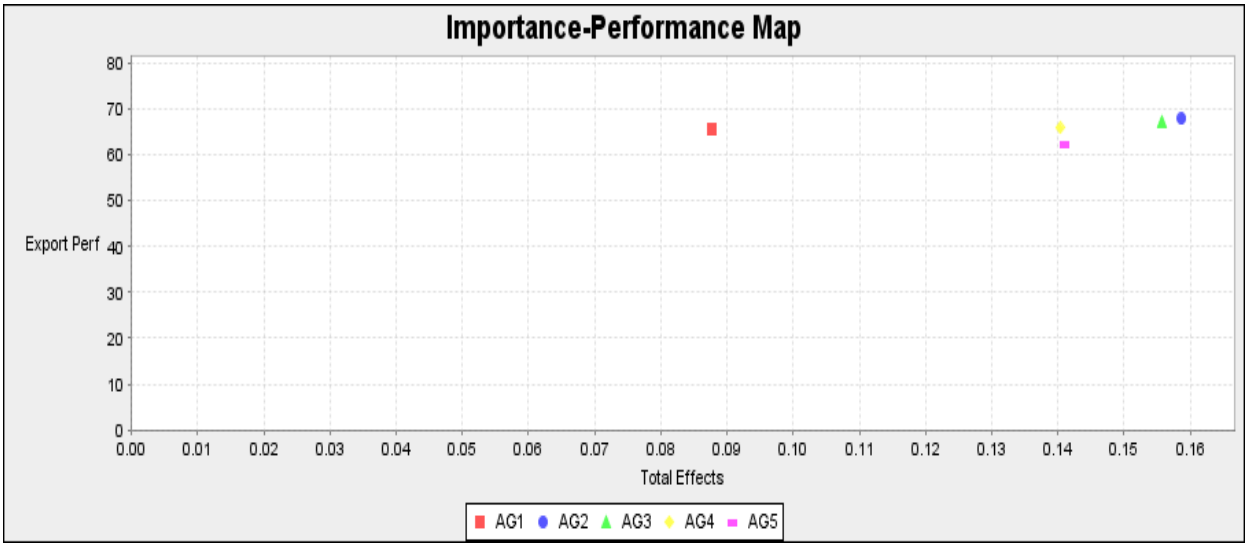
APPENDIX 2: Mechanistic firms – Bootstrapping results



APPENDIX 3: Organic firms - Bootstrapping results



APPENDIX 4: Importance-Performance Map (IPMA) results



Intervening Effect of Selected Macroeconomic Factors on Fiscal Policy Stance and Public Expenditure in Kenya

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Abstract: *This paper investigates the intervening effect of selected macroeconomic factors on the relationship between fiscal policy stance and public expenditure in Kenya using time series modelling. This paper is underpinned by the theory of fiscal policy, Wagner's Law of increasing state activities and Peacock-Wiseman hypothesis. The population is the Kenyan economy while secondary data was collected from Kenya National Bureau of Statistics reports. Time series modelling was applied. The findings indicate that foreign aid and grants have an intervening effect on the relationship between fiscal policy stance and public expenditure in Kenya. Nevertheless, fiscal stance has a statistically insignificant effect on public expenditure. The results show that fiscal stance, foreign aid and grants and public expenditure are cointegrated using the Johansen cointegration test but there is no short run causality between the variables as indicated by the Wald test statistics. The conclusion is that foreign aid and grants explain the extent to which fiscal policy stance affects the level of public expenditure in Kenya even though fiscal policy stance has an inverse relationship with public expenditure.*

Keywords: Fiscal policy stance, public expenditure, macroeconomic factors, Kenya.

Introduction

Worldwide there is increased attention on fiscal sustainability especially in developing economies (Bui, 2020) where there are numerous challenges in raising public revenues optimally in order to balance out with public expenditure. There is a growing trend of enacting fiscal rules across nations in order to have a balanced budget (Tsai, 2014) and also to avoid possible cases of unsustainable public expenditure levels or high public debt amounts which can lead to a crisis. Furthermore, the benefits of fiscal rules have been observed to enhance inclusive growth (Sabir & Qamar, 2019). There is a significant body of knowledge in the empirical literature on

macroeconomic factors, fiscal policy and even on public expenditure. However, there is insufficient evidence on the nexus between fiscal policy stance and public expenditure while considering the mediating influence of macroeconomic factors.

In Kenya, public expenditure levels have been on an increasing trend as indicated in Figure 1A in the appendix thus indicating an expansionary stance. Furthermore, fiscal policy stance as operationalized using tax revenues and budget deficits indicate an expansionary trend over the study period indicating that Kenya's fiscal policy stance has been pro-cyclical. The question then is to what extent would fiscal policy stance control public expenditure levels? Nevertheless, public expenditure exhibits an increasing smooth trend over the years as indicated in Figure 1A in the appendix. This is despite the mixed theoretical debate on public expenditure trends of countries as argued by Wagner's Law of increasing state activities that public expenditure growth follows a smooth pattern as opposed to the step-like pattern as argued by Peacock-Wiseman hypothesis since public expenditure experiences shock due to war, crisis, natural disasters or pandemics.

Fiscal policy refers to a toll of measures that governments utilise in controlling the level of public expenditure with an objective of redistributing and reallocating resources and economic stabilization (Tanzi, 2006; Perotti, 2007; Sabir & Qamar, 2019). Therefore, fiscal policy stance can be described as the fiscal position taken up by a government – contractionary or expansionary fiscal stance. Public expenditure generally refers to the expenses incurred by a government in its own maintenance, the society at large or assisting other nations. Public expenditure can be classified into recurrent expenditure and development expenditure (Dornbusch, Fischer & Startz, 2017).

In this paper, three macroeconomic factors have been selected from amongst other factors which include inflation rate, unemployment rate and foreign aid and grants. The key reason for studying the three variables is that they have been observed in previous studies (Tanzi, 2006; Gatauwa et al., 2017a) as having a significant relationship with fiscal policy. Furthermore, there is insufficient evidence on how these macroeconomic factors mediate on the relationship between fiscal policy stance and public expenditure. Dornbusch et al. (2017) describe macroeconomic factors as indicators of the economic behaviour and policies that affect an economy. The unemployment rate is the fraction of the labour force that is out of work and looking for a job or expecting a recall from a layoff while inflation is the rate of change in the general price level (Dornbusch et al., 2017). Foreign aid and grants constitute the amount of aid and grants sourced from other countries. Generally, studies on macroeconomic factors and public expenditure done by Fan and Rao (2003) and Tayeh and Mustafa (2011) argue that macroeconomic factors in a nation can determine public expenditure levels. This implies that macroeconomic stability would ignite changes in public expenditure.

There is inconclusive evidence on the mediating effect of inflation, unemployment rate and foreign aid and grants on the relationship between fiscal stance and public expenditure in Kenya in the existing finance literature. Hence, this paper seeks to answer the following research questions; what is the effect of fiscal stance on public expenditure in Kenya? Do inflation rate, unemployment rate and foreign aid and grants have a mediating effect on the relationship

between fiscal policy stance and public expenditure in Kenya? This paper is arranged in the following sections; introduction, literature review, research methodology, data analysis and conclusions.

Literature Review

Theoretical Review

This paper is anchored on the following theories; Theory of fiscal policy, Wagner's Law of increasing state activities and Peacock-Wiseman hypothesis. The Theory of fiscal policy states that fiscal policy aims at redistributing income and reallocating resources in addition to achieving stabilization in an economy (Musgrave, 1959; Johansen, 1965). This theory contends that fiscal policy can influence the increase or decrease in public expenditure considering the fiscal priorities present. Tanzi (2006) argues that fiscal policymakers have a key agenda of promoting the social and economic welfare of citizens dependent upon the government in power. Therefore, the theory of fiscal policy underpins the relationship between fiscal policy stance and public expenditure since fiscal policy intends to redistribute and reallocate resources in a nation.

Wagner's Law of increasing state activities is a theory arguing that there is a long-run tendency for public expenditure to grow in relation to national income. Wagner (1863) based the theory in Germany, where he noted that all types of governments showed an increasing trend in public expenditure regardless of their size or plans. However, Wagner was not clear on the composition of public expenditure but Musgrave (1959) argued that Wagner's focus could have been on the size of the public sector in the economy as a whole. Wagner's contributions to public expenditure theories are significant considering that before his study the popular notion was that public expenditure had an inverse relationship with economic growth. Nevertheless, over the years there has been a debate on Wagner's assertions. Some studies such as Chang (2002); Aregbeyen (2006); Kumar, Webber and Fargher (2012) have found support for Wagner's Law while on the other hand, Burney (2002); Huang (2006); Adil, Ganaie and Kamaiah (2017) have found a weak link on Wagner's Law. However, in this paper Wagner's Law implicitly underpins the relationship between the selected macroeconomic factors and public expenditure taking into consideration that macroeconomic factors explain the economic behaviour of a nation.

The Peacock-Wiseman hypothesis is a theory stating that public expenditure increases in relation to economic growth in a step-like manner unlike the smooth and continuous pattern as argued by Wagner's Law. Peacock and Wiseman (1961) argued that public expenditure in the UK from 1890 to 1955 had a smooth pattern but seemed to have steep increases especially during war or civil instability but public spending stabilized afterwards. The public expenditure trends are related to tax revenues and it is notable that the tolerable tax burden by the public is stable unless there are cases of economic or political instability. Henry and Olekalns (2000) tested the hypothesis in the UK and found support of the hypothesis where they show four instances of displacement. However, Legrenzi (2004) tested the displacement effect of P-W hypothesis in Italy but did not confirm the existence of a displacement. The divergent findings would be as a result of differences in study contexts or the type of empirical testing applied on the hypothesis.

Nevertheless, this theory underpins the relationship between fiscal policy stance and public expenditure considering that fiscal stance is operationalized by tax and budget deficits.

Empirical Review

In the finance literature, several studies have been undertaken where they relate macroeconomic factors to economic growth but there is still insufficient evidence on how these macroeconomic factors relate to fiscal policy stance and public expenditure. For instance, UNCTAD report (2010) using a descriptive research approach examines macroeconomic policy and development during the 2008 global financial crisis (GFC). The report argues that the popular notion before the GFC was that countries undergoing economic distress should implement prudent measures in the form of tight fiscal policies to achieve macroeconomic stability. Canuto (2009) using a descriptive research approach, supports the view that in a crisis period and recession, which is characterized by rising unemployment, rising interest rates and a fall in commodity prices, countries should implement contractionary economic policies. However, Brixiova (2010) and UNCTAD (2010) argue that non-restrictive policies are beneficial to all economies inclusive of Africa in order to stimulate aggregate demand in an economy as part of post-crisis recovery.

The fiscal policy adopted by a country would influence the macroeconomic factors and essentially the levels of public expenditure. Perotti (2007) argues that a rise in the interest rate regulated by the monetary authorities would lead to some fall in the output gap and a slowdown in inflation. Fan and Rao (2003) using regression analysis from 1980 to 1998 across 43 developing nations in Asia, Africa and Latin America contend that the macroeconomic reforms of a nation can determine the level of public expenditure in a country. This implies that changes in macroeconomic factors would affect the level of public expenditure as influenced by the fiscal policy adopted by a government.

Studies on the relationship between macroeconomic factors and public expenditure exhibit varied findings. For instance, Njeru (2003) using cointegration approach for the period 1970 to 1999 in Kenya contends that the level of foreign aid would affect the amounts of public expenditure. This means that economies which mainly finance their budgets using a significant amount of debt, the public expenditures in those economies would be affected. Remmer (2004) using time series cross sectional regression analysis from 1970 to 1999 in 120 middle and lower income countries, sought to examine whether foreign aid generates incentives and opportunities for public expenditure growth. The study findings indicate that foreign aid generates incentives for the growth of public expenditure. Similarly, Fan and Rao (2003) investigated the trends and impact of public expenditure in developing countries and found that public debt levels can determine the level of public expenditure. On the converse, Samir and Qamar (2019) using the system generalized method in developing Asian economies argue that fiscal policy is dependent on the distribution of public revenue or expenditures in an economy.

On the interrelation between the unemployment rate and inflation rate on public expenditure, Tayeh and Mustafa (2011) using correlation analysis from 1979 to 2000 in Jordan found that unemployment rates and inflation rates have a significant relationship with public expenditure. The study further argues that a government uses fiscal policy to fight inflation since it would respond by reducing public spending when inflation increases and when the share of

unemployment rises, it is inclined to increase public spending. However, the study did not extend the modelling to advanced methodologies such as using the error correction model to test the interrelationships among the variables.

Magazzino (2011) using time series data from 1970 to 2009 in the Mediterranean countries found that public expenditure growth and inflation have a long run relation in Portugal. Granger causality tests were also undertaken and the findings indicate that there is bi-directional flow for public expenditure growth and inflation in Italy in the short run, unidirectional flow from inflation to public expenditure in Portugal in the long run, in France a unidirectional flow in the short run but in the opposite direction (from public expenditure to inflation) in Cyprus, Malta and Spain. Similarly, Ezirim, Moughalu and Elike (2008) undertook a study on public expenditure and inflation from 1970 to 2002 using cointegration analysis and Granger causality testing. The study found that public expenditure and inflation are cointegrated thus implying that they have a long run interrelation. Ayo, Nwosa and Ditimi (2012) indicate that from public expenditure to the inflation rate, there exists unidirectional causality. However, there are studies that report a weak relationship between inflation and public expenditure. For instance, Han and Mulligan (2008) using time series data from 1973 to 1990 based on eighty countries indicate that permanently high non-defence public expenditure across countries is weakly related to inflation. Generally, the studies on inflation and public expenditure present mixed findings yet they use Granger causality tests to explore these interrelationships. The differences in economic environment such as whether a developed or developing region, whether the data used is time series or cross-sectional or the theoretical underpinning of the study could be some of the reasons that could explain the divergence of results.

There has been extensive literature on budget deficits and their effects on economies. Nevertheless, there was a study done by Alesina and Perotti (1994) that sought to examine the institutional determinants of budget deficits. The study contends that budget deficits should only be observed during wars and recessions since those are times when public expenditure is temporarily high. Interestingly the study findings indicate that fiscal illusion by voters due to their ignorance on government budget constraints and asymmetric stabilization policies that entail politicians always willing to run deficits during recessions contribute to the rising levels of budget deficits. Similarly, Beetsma, Giuliodori and Klaassen (2008) examined the effect of public spending on budget deficits in the European Union. Their findings indicate that increases in public spending affect budget deficits with a greater impact to open economies as compared to the closed ones. On the other hand, Haffert and Mehrtens (2015) analyse budget surpluses and public expenditure in six developed economies between 1980 and 2009 with findings indicating that surpluses were achieved by public expenditure cuts but mainly used for tax cuts.

In summary, from the finance literature various research gaps emerge. First, is that there is insufficient evidence on the effects of fiscal policy stance on public expenditure. This means that the link between the two variables requires to be investigated considering that governments are grappling with the issue of controlling the levels of public expenditure. Secondly, the intervening influence of macroeconomic factors on the relationship between fiscal policy stance and public expenditure is not clear. This is considering that macroeconomic factors are critical to the

success of fiscal policy implementation and ultimately on controlling the levels of public expenditure in an economy.

Research Methodology

The causal analytical research design was adopted since it enabled the determination of the cause and effect in examining the effect of selected macroeconomic factors on the relationship between fiscal policy stance and public expenditure in Kenya. The study population period was 1964 to 2015. Secondary data on fiscal policy stance, macroeconomic factors (inflation rates, unemployment rates and foreign aid & grants) and public expenditure was collected from Kenya National Bureau of Statistics (KNBS) economic surveys, statistical abstracts and annual budget estimates books. Fiscal policy stance was measured by budget deficits and tax revenues; macroeconomic factors were measured using the annual inflation rates, unemployment rates and the annual amount of foreign aid and grants while public expenditure was measured by annual recurrent and development expenditure. The data collected were analysed using descriptive and inferential statistics where it involved a description of the data, undertaking of diagnostic tests and finally time series modelling. Description of data involves the determination of the measures of central tendency and dispersion. Pre-diagnostic testing involved undertaking Stationarity test, Johansen cointegration test and Granger causality test. Post-diagnostic testing entailed Wald test, serial correlation test and heteroscedasticity test. Finally, time series modelling was undertaken using Vector-Auto Regressive (VAR) and Vector Error Correction (VECM) models.

In establishing the effect of macroeconomic factors on the relationship between fiscal policy stance and public expenditure, three steps were involved in testing the intervening effect according to the Baron and Kenny (1986) approach and further supported by MacKinnon et al. (2002). The first step involved regressing fiscal policy stance against public expenditure using a VECM model as follows;

$$PExp_t = \propto_{10} + \propto_{11} PExp_{t-1} + \propto_{12} FP_{t-1} + \varepsilon_{1t} \quad (1)$$

Where:

$PExp_t$ = Public Expenditure

$PExp_{t-1}$ = Lagged Public Expenditure

FP_{t-1} = Fiscal Policy Stance

α_{10} = The Constant or Intercept

α_{11} = Model Coefficient of the Lagged Public Expenditure

α_{12} = Model Coefficient of Fiscal Policy Stance

ε_{1t} = Error Term or Structural Shock

The second step involved regressing fiscal policy stance against inflation rate and unemployment rate using VAR models while a VECM model was used in regressing fiscal policy stance against foreign aid & grants as follows;

$$Unemp_t = \propto_{10} + \propto_{11} FP_t + \varepsilon_t \qquad (2)$$

$$Infl_t = \propto_{20} + \propto_{21} FP_t + \varepsilon_t \qquad (3)$$

$$FGrnt_t = \propto_{30} + \propto_{31} FP_t + \varepsilon_t \qquad (4)$$

Where:

$Unemp_t$ = Unemployment Rate

$Infl_t$ = Inflation Rate

$FGrnt_t$ = Foreign Aid and Grants

FP_t = Fiscal Policy Stance

$\alpha_{10}, \alpha_{20}, \alpha_{30}$ = Constant or Intercept

$\alpha_{11}, \alpha_{21}, \alpha_{31}$ = Model Coefficient of Fiscal Stance

ε_t = Error Term or Structural Shock

The final step involved regressing fiscal policy stance and economic growth on public expenditure using a VECM model as follows;

$$Y_t = \beta_0 + \beta_1 Y_{t-1} + \sum_{i=1}^{m} \gamma_i X_{it} + \varepsilon_t \qquad (5)$$

Where:

Y_t = Public Expenditure

Y_{t-1} = Lagged Public Expenditure

X_{it} = Independent Variables

β_0 = Constant or Intercept

β_1 = Model Coefficient of the Lagged Public Expenditure

γ_i = Model Coefficients of the Independent Variables

ε_t = Error Term or Structural Shock

Data Analysis

Summary Statistics

Fiscal policy stance (budget deficit) has a mean of Ksh. 42507.66 million with a standard deviation of Ksh. 100432.6 million as indicated in Table 1. Fiscal policy stance (tax) has a mean of Ksh. 123379.8 million with a standard deviation of Ksh. 196962.8 million. Unemployment, inflation and foreign aid and grants have a mean of 9.51%, 9.95% and Ksh. 6537.43 million respectively. Public expenditure has a mean of Ksh. 192760.3 million with a standard deviation of Ksh. 294372.1 million. Fiscal policy stance, inflation rate, foreign aid and public expenditure have a positive distribution as indicated by the skewness. On kurtosis, the variables are highly peaked relative to the peakedness of a normal distribution with values above three (3) implying that the distribution is leptokurtic.

Table 1. Summary Statistics of the Study Variables

	Budget Deficit (Ksh. M)	Tax (Ksh. M)	Unemployment Rate (%)	Inflation Rate (%)	Foreign Aid & Grants (Ksh. M)	Public Expenditure (Ksh. M)
Mean	42507.66	123379.8	9.51	9.95	6537.43	192760.3
Median	395.50	30486.6	9.55	9.60	3875.64	53007.75
Maximum	692000.0	1021597.0	12.20	28.80	57082.00	1953509.0
Minimum	-44986.00	735.32	6.90	-0.50	3.42	1362.40
Std. Dev.	100432.6	196962.8	1.08	6.13	10793.38	294372.1
Skewness	2.14	1.95	0.15	1.01	2.82	1.96
Kurtosis	6.24	5.84	3.83	4.35	12.18	6.13
Jarque-Bera	59.90	48.39	1.61	12.31	241.87	52.44

Diagnostic Test Results

This paper used the Augmented Dickey-Fuller (ADF) test for Stationarity and Johansen test for cointegration in undertaking diagnostic tests. The Stationarity tests were undertaken on fiscal policy stance (tax, budget deficit), unemployment rate, inflation rate, foreign aid and grants and public expenditure in order to determine if they are stationary or non-stationary.

Table 2. Results of Stationarity Tests

Variable	ADF Statistic at Level	ADF Statistic at First Differencing	ADF Statistic at Second Differencing
Tax	-0.5459 (0.8728)	-6.9760 (0.0000)	
Budget Deficit	-0.2621 (0.9223)	-0.7274 (0.8293)	-10.7528 (0.0000)
Unemployment Rate	-3.8872 (0.0042)		
Inflation Rate	-5.5615 (0.0000)		
Foreign Aid & Grants	1.1795 (0.9975)	-3.6062 (0.0099)	
Public Expenditure	9.5844 (1.0000)	4.5209 (1.0000)	-16.1278 (0.0000)

In Table 2, the stationarity results indicate that tax and development expenditure are stationary at first differencing which means that they are integrated at order one I(1). On the other hand, budget deficit, recurrent expenditure and public expenditure are stationary at second differencing meaning that they are integrated at order two I(2). Cointegration tests were undertaken in order to test if the variables have a long run relationship between them. The Johansen test for cointegration was conducted using the trace statistic and maximum Eigen values. For cointegration to exist, the trace statistic should be greater than the critical values at 5% level of significance.

Table 3. Results of Johansen Cointegration Test

	Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.
Budget Deficit & Public Expenditure	None*	0.7121	67.3906	20.2618	0.0000
	At most 1	0.1469	7.6267	9.1645	0.0971
Tax & Public Expenditure	None*	0.4578	50.7290	20.2618	0.0000
	At most 1*	0.3733	21.9590	9.1645	0.0001
Budget Deficit & Unemployment Rate	None	0.1507	13.9976	20.2618	0.2896
	At most 1	0.1204	6.1599	9.1645	0.1787
Budget Deficit & Inflation Rate	None	0.1834	17.8665	20.2618	0.1034
	At most 1	0.1560	8.1415	9.1645	0.0779
Budget Deficit & Foreign Aid and Grants	None*	0.3664	23.8262	20.2618	0.0155
	At most 1	0.0393	1.9244	9.1645	0.7927
Tax & Unemployment Rate	None*	0.3115	24.5437	20.2618	0.0121
	At most 1	0.1289	6.6260	9.1645	0.1476
Tax & Inflation Rate	None*	0.3396	28.3674	20.2618	0.0031
	At most 1	0.1614	8.4514	9.1645	0.0682
Tax & Foreign Aid and Grants	None*	0.3047	27.7818	20.2618	0.0038
	At most 1*	0.1938	10.3415	9.1645	0.0298

* denotes rejection of the null hypothesis at the 0.05 level of significance

The results in Table 3 indicate that budget deficit and public expenditure are cointegrated since the trace statistics of 67.3906 is greater than the critical value of 20.2618 at 5% level of significance. Similarly, there is cointegration between tax and public expenditure since the trace statistics is greater than the critical value at 5% level of significance. However, tax seems to have a stronger level of cointegration which is essentially a stronger long-run relationship with public expenditure as compared to budget deficit with public expenditure as evidenced by the number

of co-integrating equation results in Table 3. Granger causality tests were undertaken so as to determine if one variable causes another or simply testing the level of prediction of one variable against another. The null hypothesis in the Granger causality test states that a variable x does not Granger cause variable y in the first regression while variable y does not Granger cause variable x in the second regression at 5% level of significance.

Table 4. Results of Granger Causality Tests

Null Hypothesis	f-Statistic	P-values
Tax revenue does not Granger cause public expenditure	0.2904	0.7494
Public expenditure does not Granger cause tax revenue	2.4340	0.0997
Budget deficit does not Granger cause tax revenue	0.4930	0.6142
Tax revenue does not Granger cause budget deficit	1.6651	0.2011
Tax revenue does not Granger cause inflation rate	0.0103	0.9898
Inflation rate does not Granger cause tax revenue	1.5524	0.2234
Budget deficit does not Granger cause inflation rate	0.7747	0.4672
Inflation rate does not Granger cause budget deficit	0.6156	0.5450
Tax revenue does not Granger cause unemployment rate	0.0311	0.9694
Unemployment rate does not Granger cause tax revenue	0.0905	0.9137
Budget deficit does not Granger cause unemployment rate	0.0366	0.9641
Unemployment rate does not Granger cause budget deficit	0.0233	0.9770
Foreign aid & grants does not Granger cause budget deficit	1.5967	0.2143
Budget deficit does not Granger cause foreign aid & grants	0.2880	0.7512

The findings in Table 4 indicate that tax revenue does not Granger-cause public expenditure and vice versa at 5% level of significance as indicated by the *p*-values of 0.7494 and 0.0997. Budget deficit does not Granger-cause tax revenue and vice versa at 5% level of significance as indicated by the p-values of 0.6142 and 0.2011. Foreign aid and grants do not Granger-cause budget deficit and vice versa at 5% level of significance as indicated by the p-values of 0.2143 and 0.7512. In essence, there is no Granger causality between the variables in Table 4 above.

Model Specification

Fiscal Policy Stance, Selected Macroeconomic Factors and Public Expenditure

The first step of testing intervening or mediating effect involved fiscal policy stance and public expenditure whereby a VECM model was used. The results are indicated in Table 1A in the appendix, where the effect of fiscal policy stance on public expenditure is statistically insignificant. The second step of testing intervening or mediating effect which entailed fiscal policy stance and each of the selected macroeconomic factors (inflation rate, unemployment rate and foreign aid & grants) was established using VAR models and a VECM model as determined by the existence of cointegration between the variables in a model. Pre-diagnostic checking and post diagnostic checking was undertaken.

Fiscal Policy Stance and Inflation Rate

The effect of fiscal policy stance on inflation rate was established using a VAR model. Pre-diagnostic checking and post diagnostic checking was undertaken. Using lag length criteria/selection method, three (3) lags were selected since under the Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwartz Information Criterion (SC) and Hannan-Quinn Information Criterion (HQ) the lag value was the lowest. After the lag selection was done, the effect of fiscal policy stance on inflation rate was undertaken. Before running the VAR model, diagnostic tests were done such as Johansen cointegration test and Stationarity test so as to ensure that the model would generate robust results. The data were tested for Stationarity at level and if it was not stationary, then it was made stationary at first differencing or second differencing. For the cointegration tests, there was no cointegration between fiscal policy stance and inflation rate hence a VAR model being the most appropriate model to be used. The VAR model is as shown next in Table 5.

Table 5. VAR Model for Fiscal Policy Stance and Inflation Rate

Equation: INFL = C(1)*INFL(-1) + C(2)*INFL(-2) + C(3)*INFL(-3) + C(4) *TAX(-1) + C(5)*TAX(-2)

+ C(6)*TAX(-3) + C(7)*BDEFIC(-1) + C(8)*BDEFIC(-2) + C(9)*BDEFIC(-3) + C(10)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.120961	0.174718	0.692323	0.4931
C(2)	0.336349	0.162970	2.063868	0.0461
C(3)	0.110923	0.179778	0.616998	0.5410
C(4)	-1.510121	6.557149	-0.230301	0.8191
C(5)	-2.374565	9.267427	-0.256227	0.7992
C(6)	3.906250	6.039229	0.646813	0.5217
C(7)	4.25E-05	4.66E-05	0.912172	0.3676
C(8)	-8.49E-05	6.55E-05	-1.297048	0.2026
C(9)	3.92E-05	6.00E-05	0.652339	0.5182
C(10)	5.026319	6.155116	0.816608	0.4194

R-squared	0.207301	Mean dependent var	10.12128
Adjusted R-squared	0.014482	S.D. dependent var	6.285108
S.E. of regression	6.239432	Akaike info criterion	6.685958
Sum squared resid	1440.429	Schwarz criterion	7.079606
Log likelihood	-147.1200	Hannan-Quinn criter.	6.834090
F-statistic	1.075106	Durbin-Watson stat	1.981043
Prob(F-statistic)	0.403453		

From Table 5, the effect of fiscal policy stance on inflation rate is statistically insignificant as indicated in the p-values except for the two lagged variable of inflation with a *p*-value of 0.0461

at 5% level of significance. The R^2 is 20.73% meaning that 20.73% of the variations in inflation can be explained by fiscal policy stance.

The joint significance between budget deficit and inflation rate was tested using the Wald test as indicated in Table 2A in the appendix. From Table 2A, we accept the null hypothesis that budget deficit and its lagged variables cannot jointly influence inflation rate as indicated by the *p*-value of 0.6097. Also we accept the null hypothesis that budget deficit and its lagged variables cannot jointly influence tax as indicated by the *p*-value of 0.2756. From Table 2A in the appendix, we reject the null hypothesis that tax and its lagged variables cannot jointly influence budget deficit as indicated by the *p*-value of 0.0338. Therefore, there is joint significance between tax and budget deficit. Table 6 indicates the serial correlation test undertaken so as to determine if there was any autocorrelation between the variables after running the model.

Table 6. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.623811	Prob. F(3,34)	0.0663
Obs*R-squared	8.835556	Prob. Chi-Square(3)	0.0316

There is serial correlation in the model as indicated by the *p*-value of 0.0316 while the corresponding R^2 is 8.835556. Table 7 shows the results of the heteroscedasticity test done in order to determine if there was heteroscedasticity between the variables after running the model.

Table 7. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.652829	Prob. F(9,37)	0.1363
Obs*R-squared	13.47741	Prob. Chi-Square(9)	0.1422
Scaled explained SS	8.002532	Prob. Chi-Square(9)	0.5339

We accept the null hypothesis that states that there is no heteroscedasticity as indicated by the *p*-value of 0.1422 at 5% level of significance while the corresponding R^2 is 13.47741.

Fiscal Policy Stance and Unemployment Rate

The effect of fiscal policy stance on unemployment rate was established using a VAR model. Pre-diagnostic checking and post diagnostic checking was undertaken. Using the lag length criteria/selection method used in testing the effect of fiscal policy stance on unemployment rate, one (1) lag was selected since under the LR, FPE, AIC, SC and HQ the lag value was the lowest.

After the lag selection was done, the effect of fiscal policy stance on unemployment rate was undertaken. Before running the VAR model, diagnostic tests were done such as the Johansen cointegration test and Stationarity tests so as to ensure that the model would generate robust results. The data were tested for Stationarity at level and if it was not stationary then it was made stationary at first differencing or second differencing. For the cointegration tests, there was no cointegration between fiscal policy stance and unemployment rate hence a VAR model being the most appropriate model to be used. The VAR model is as shown in Table 8.

Table 8. VAR Model for Fiscal Policy Stance and Unemployment Rate

Equation: UNEMP = C(1)*UNEMP(-1) + C(2)*LNTAX(-1) + C(3)*BDEFIC(-1) + C(4)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.515862	0.126849	4.066725	0.0002
C(2)	0.005419	0.085496	0.063386	0.9497
C(3)	-5.45E-07	1.92E-06	-0.283869	0.7778
C(4)	4.548747	1.489158	3.054576	0.0038

R-squared	0.272725	Mean dependent var	9.491837
Adjusted R-squared	0.224240	S.D. dependent var	1.088354
S.E. of regression	0.958593	Akaike info criterion	2.831407
Sum squared resid	41.35050	Schwarz criterion	2.985841
Log likelihood	-65.36946	Hannan-Quinn criter.	2.889999
F-statistic	5.624927	Durbin-Watson stat	2.250381
Prob(F-statistic)	0.002315		

From Table 8, the effect of fiscal policy stance on the unemployment rate is statistically insignificant as indicated in the *p*-values except the lagged variable of unemployment with a *p*-value of 0.0002 at 5% level of significance. The R^2 is 27.27% meaning that 27.27% of the variations in unemployment can be explained by fiscal policy stance.

The joint significance between budget deficit and unemployment rate was tested using the Wald test as indicated in Table 2A in the appendix. As shown in Table 2A, we accept the null hypothesis that budget deficit and its lagged variables cannot jointly influence unemployment rate as indicated by the *p*-value of 0.7765. Thus, we accept the null hypothesis that tax and its lagged variables cannot jointly influence unemployment rate as indicated by the *p*-value of 0.9495. According to Table 2A, we accept the null hypothesis that budget deficit and its lagged variables cannot jointly influence tax as indicated by the *p*-value of 0.9980 and we also accept the null hypothesis that tax and its lagged variables cannot jointly influence budget deficit as indicated by the *p*-value of 0.0675. Serial correlation test was done in order to determine if there was any autocorrelation between the variables after running the model as indicated in Table 9.

Table 9. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.699867	Prob. F(1,44)	0.1075
Obs*R-squared	2.832845	Prob. Chi-Square(1)	0.0924

As indicated in Table 9 above, we accept the null hypothesis that there is no serial correlation in the series residual as indicated by the *p*-value of 0.0924. Heteroscedasticity test was done in order to determine if there was heteroscedasticity between the variables after running the model as indicated in Table 10.

Table 10. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	5.935836	Prob. F(3,45)	0.0017
Obs*R-squared	13.89273	Prob. Chi-Square(3)	0.0031
Scaled explained SS	29.35110	Prob. Chi-Square(3)	0.0000

As indicated in Table 10, we reject the null hypothesis that states that there is no heteroscedasticity as indicated by the *p*-value of 0.0031 at 5% level of significance while the corresponding R^2 is 13.89273.

Fiscal Policy Stance and Foreign Aid and Grants

The effect of fiscal policy stance on foreign aid & grants was also established using a VECM model and pre-diagnostic checking and post diagnostic checking was undertaken. Using the lag length criteria/selection method, one (1) lag was selected since under the LR, FPE, AIC, SC and HQ the lag value was the lowest. After the lag selection was done, the effect of fiscal policy stance on foreign aid & grants was undertaken.

A VECM model was used to test the hypothesis. Before running the VECM model, diagnostic tests were done such as Johansen cointegration test and Stationarity test so as to ensure that the model would generate robust results. The data were tested for Stationarity at level and if it was not stationary then it was made stationary at first differencing or second differencing. For the cointegration tests, there was cointegration between fiscal policy stance and foreign aid & grants hence a VECM model being the most appropriate model to be used. The VECM model is as shown next;

Table 11. VECM Model for Fiscal Policy Stance and Foreign Aid & Grants

D(FAID) = C(1)*(FAID(-1) - 1.57215141671*TAX(-1) + 6.50736179382E-06*BDEFIC(-1) + 8.97000160415) + C(2) *D(FAID(-1))

+ C(3)*D(TAX(-1)) + C(4)*D(BDEFIC(-1)) + C(5)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.515110	0.118614	-4.342744	0.0001
C(2)	0.002664	0.132603	0.020088	0.9841
C(3)	-0.071623	0.645929	-0.110883	0.9122
C(4)	-2.08E-06	4.36E-06	-0.475706	0.6367
C(5)	0.132701	0.135081	0.982388	0.3314

R-squared	0.333789	Mean dependent var	0.107992
Adjusted R-squared	0.271816	S.D. dependent var	0.810732
S.E. of regression	0.691827	Akaike info criterion	2.199372
Sum squared resid	20.58088	Schwarz criterion	2.394289
Log likelihood	-47.78493	Hannan-Quinn criter.	2.273031
F-statistic	5.386027	Durbin-Watson stat	2.085435
Prob(F-statistic)	0.001319		

From Table 11, the effect of fiscal policy stance on foreign aid & grants is statistically insignificant as indicated in the *p*-values while the R^2 is 33.38% meaning that 33.38% of the variations in foreign aid & grants can be explained by fiscal policy stance. The p-value of C(1) or the constant is 0.0001 meaning that there is a long run causality running from fiscal policy stance to foreign aid & grants. Short run causality was also tested using the Wald test as indicated in Tables 3A in the appendix. The results in Table 3A show that there was no short run causality running from tax to foreign aid & grants as indicated by the *p*-value of 0.9117. As indicated in Table 3A, there was no short run causality running from budget deficit to foreign aid & grants as indicated by the *p*-value of 0.6343. Serial correlation test was done in order to determine if there was any autocorrelation between the variables after running the model as indicated in Table 12.

Table 12. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.776253	Prob. F(1,42)	0.1898
Obs*R-squared	1.947635	Prob. Chi-Square(1)	0.1628

From Table 12, we accept the null hypothesis that there is no serial correlation in the series residual as indicated by the *p*-value of 0.1628. Table 13 shows the results of the heteroscedasticity test done in order to determine if there was heteroscedasticity between the variables after running the model. As indicated in Table 13, we reject the null hypothesis that states that there is no heteroscedasticity as indicated by the *p*-value of 0.0197 at 5% level of significance while the corresponding R^2 is 15.06716.

Table 13. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	3.126331	Prob. F(6,41)	0.0129
Obs*R-squared	15.06716	Prob. Chi-Square(6)	0.0197
Scaled explained SS	17.75203	Prob. Chi-Square(6)	0.0069

The final step of testing intervening effect involves regressing fiscal policy stance and macroeconomic factors on public expenditure using a VECM model as determined by the existence of cointegration between the variables. Pre-diagnostic checking and post diagnostic checking was undertaken. Lag length criteria/selection method was used in testing the effect of

fiscal policy stance and macroeconomic factors on public expenditure. Subsequently, one (1) lag was selected since under the LR, FPE, AIC, SC and HQ the lag value was the lowest. After the lag selection was done, the effect of fiscal policy stance and macroeconomic factors on public expenditure was undertaken.

A VECM model was used to test the hypothesis. Before running the VECM model, diagnostic tests were done such as Johansen cointegration test and Stationarity test so as to ensure that the model would generate robust results. The data were tested for Stationarity at level and if it was not stationary then it was made stationary at first differencing or second differencing. For the cointegration tests, there was cointegration between fiscal policy stance, macroeconomic factors and public expenditure hence a VECM model being the most appropriate model to be used. The VECM model is as shown next in Table 14.

Table 14. VECM Model for Fiscal Stance, Macroeconomic Factors & Public Expenditure

D(PEXP) = C(1)*(PEXP(-1) - 15736.2245224*LNTAX(-1) - 0.24453168855*BDEFIC(-1) + 2431.8744158 *INFL(-1) - 13380.6980862
*UNEMP(-1) + 1.26755271764*FAID(-1) + 88692.7003921) + C(2)*D(PEXP(-1)) + C(3)*D(TAX(-1)) + C(4)*D(BDEFIC(-1)) + C(5)
*D(INFL(-1)) + C(6) *D(UNEMP(-1)) + C(7)*D(FAID(-1)) + C(8)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.342478	0.038840	8.817671	0.0000
C(2)	-0.912425	0.205434	-4.441446	0.0001
C(3)	27691.44	25462.30	1.087547	0.2833
C(4)	-0.478694	0.215678	-2.219485	0.0322
C(5)	-633.4364	497.5667	-1.273068	0.2103
C(6)	3182.388	3428.008	0.928349	0.3588
C(7)	1.774987	0.671363	2.643857	0.0117
C(8)	44128.90	5763.727	7.656313	0.0000

R-squared	0.783399	Mean dependent var	25833.03
Adjusted R-squared	0.745494	S.D. dependent var	49717.29
S.E. of regression	25081.69	Akaike info criterion	23.24868
Sum squared resid	2.52E+10	Schwarz criterion	23.56054
Log likelihood	-549.9682	Hannan-Quinn criter.	23.36653
F-statistic	20.66730	Durbin-Watson stat	1.849100
Prob(F-statistic)	0.000000		

From Table 14, the effect of fiscal policy stance and macroeconomic factors on public expenditure is statistically significant as indicated in the *p*-values while the R^2 is 78.34% meaning that 78.34% of the variations in public expenditure can be explained by fiscal policy

stance and the macroeconomic factors. As indicated in Table 14 fiscal policy stance (budget deficit), foreign aid & grants and the lagged variable of public expenditure have a significant effect on public expenditure. The *p*-value of C(1) or the constant is 0.0000 meaning that there is a long run causality running from fiscal policy stance and macroeconomic factors to public expenditure. The f-statistic is 0.000000 meaning that the model fits the data well.

Short run causality was also tested using the Wald test as indicated in Table 3A in the appendix. As indicated in Table 3A, there was no short run causality running from tax to public expenditure as indicated by the *p*-value of 0.2768. However, there was short run causality running from budget deficit to public expenditure as indicated by the *p*-value of 0.0265. Nevertheless, there was no short run causality running from inflation rate to public expenditure as indicated by the *p*-value of 0.2030. Furthermore, there was no short run causality running from the unemployment rate to public expenditure as indicated by the *p*-value of 0.3532. Finally, there was short run causality running from foreign aid & grants to public expenditure as indicated by the *p*-value of 0.0082. Table 15 shows the results of the serial correlation test undertaken in order to determine if there was any autocorrelation between the variables after running the model.

Table 15. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.699733	Prob. F(1,39)	0.4080
Obs*R-squared	0.846030	Prob. Chi-Square(1)	0.3577

From Table 15, we accept the null hypothesis that there is no serial correlation in the series residual as indicated by the *p*-value of 0.3577. Heteroscedasticity test was done in order to determine if there was heteroscedasticity between the variables after running the model as indicated in Table 16.

Table 16. Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.290103	Prob. F(12,35)	0.2675
Obs*R-squared	14.72031	Prob. Chi-Square(12)	0.2571
Scaled explained SS	46.13026	Prob. Chi-Square(12)	0.0000

Table 16 results indicate that we accept the null hypothesis that states there is no heteroscedasticity as indicated by the *p*-value of 0.2571 at 5% level of significance while the corresponding R^2 is 14.72031.

The final step of testing the intervening effect which involves regressing fiscal policy stance and macroeconomic factors on public expenditure using a VECM model is indicated in Table 14. The results show that fiscal policy stance and foreign aid & grants have a significant effect on

public expenditure. Therefore, foreign aid & grants as one of the macroeconomic factors have a mediating/intervening effect on the relationship between fiscal policy stance and public expenditure. Table 17 shown next gives a summary of the model coefficients before and after the intervening variable is introduced as also indicated in Table 1A (in the appendix) and Table 14 respectively. Also the percentage change as a result of the intervening variable which is macroeconomic factors is also indicated.

Table 17. Intervening Influence of Macroeconomic Factors on Fiscal Stance and Public Expenditure

Variables		Coefficients without intervening variable	Coefficients with intervening variable	% Change in the coefficients
Fiscal Policy Stance	Tax(-1)	-0.0038	27691.44	100%
	Tax(-2)	-0.1580		
	Budget Deficit (-1)	-0.00000141	-0.4787	99.99%
	Budget Deficit (-2)	0.0000000587		
Macro-economic Factors	Inflation (-1)		-633.44	
	Unemployment (-1)		3182.39	
	Foreign Aid & Grants (-1)		1.775	

As indicated in Table 17, there is a significant change in the model coefficients after the intervening variable (macroeconomic factors) is introduced in the relationship between fiscal policy stance and public expenditure. The percentage changes are approximately 100%.

Discussion of Findings

This paper sought to find out the intervening effect of selected macroeconomic factors on the relationship between fiscal policy stance and public expenditure in Kenya. Three steps were used according to Baron and Kenny (1986) and further supported by MacKinnon et al. (2002) with the first step testing the effect of fiscal policy stance and public expenditure being insignificant. The second step testing the effect of fiscal policy stance on macroeconomic factors was insignificant. However, the final step of testing the effect of fiscal policy stance and macroeconomic factors on public expenditure was significant.

Thus, the findings indicate that foreign aid and grants have an intervening effect on the relationship between fiscal policy stance and public expenditure in Kenya. The study was unique in the aspect of examining the mediating or intervening effect of selected macroeconomic

factors. However, there are other studies with similar findings such as Gatauwa et al. (2017b) that examined intervening effect of economic growth on the link between fiscal policy stance and public expenditure. Similarly, Stancik and Valila (2012) indicate that fiscal policy stance affects public expenditure resulting in an increasing proportion of development and loosening favouring recurrent expenditure. Nevertheless, this paper found a statistically insignificant relationship between fiscal stance and public expenditure. These findings differ from those of Stancik and Valila (2012) which could be as a result of differences in methodology considering that Stancik and Valila used the General Method of Moments (GMM) modelling while this paper used time series modelling using VECM and VAR models. Furthermore, the differences in the study context – EU; Kenya – could be attributed in the results and findings.

Conclusions

First, fiscal policy stance has a weak effect on each individual macroeconomic variable. This implies that there could be several other variables that could explain a more significant effect on each of the macroeconomic variables other than fiscal policy stance. Secondly, the direct effect of fiscal policy stance on macroeconomic factors has not been widely examined. In the finance literature, there are studies that argue in favour of adoption of restrictive fiscal policies during a worsening macroeconomic environment such as increased level of unemployment yet these studies do not clearly show how fiscal policy would influence a particular set of macroeconomic factors. Thirdly, this study contributes to the finance literature by examining the relationship between fiscal policy stance and macroeconomic factors which is a relationship insufficiently explored in empirical literature. Finally, from the study findings foreign aid and grants have an intervening effect on the link between fiscal policy stance and public expenditure in Kenya.

References

Adil, M.H., Ganaie, A.A., & Kamaiah, B. (2017). Wagner's hypothesis: An empirical verification. *IIM Kozhikode Society & Management Review*, *6*(1), 1–12.

Alesina, A., & Perotti, R. (1994). The political economy of budget deficits. *National Bureau of Economic Research Working Paper Series*, No. 4673, NBER.

Aregbeyen, O. (2006). Cointegration, causality and Wagner's Law: A Test for Nigeria, 1970–2003. *Central Bank of Nigeria Economic and Financial Review*, *44*(2), 1–17.

Ayo, O., Nwosa, P., & Ditimi, A. (2012). A trivariate causality test among economic growth, government expenditure and inflation rate: Evidence from Nigeria. *Research Journal of Finance and Accounting*, *3*(1), 65–73.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.

Barro, R., & Grilli, V. (1994). *European Macroeconomics.* Basingstoke, Hampshire: Macmillan.

Beetsma, R., Klaassen, F., & Giuliodori, M. (2008). The effects of public spending shocks on trade balances and budget deficits in the European Union. *Journal of the European Economic Association*, *6*(2/3), 414–423.

Brixiova, Z. (2010). Africa in the post-crisis global economy: Turning the recovery into strong, sustained and shared growth. *The Committee of Ten Policy Briefs (C-10 PB)* http://www.afdb.org/

Bui, D.T. (2020). Fiscal sustainability in developing Asia – new evidence from panel correlated common effect model. *Journal of Asian Business and Economic Studies*, 27(1): 66–80.

Burney, N. A. (2002). Wagner's hypothesis: Evidence from Kuwait using cointegration tests. *Applied Economics*, *34*(1), 49–57.

Canuto, O. (2009). Fiscal policy in developing countries: Implications from the current crisis, *65th Annual Congress of the International Institute of Public Finance*, Cape Town, South Africa.

Chang, T. (2002). An econometric test of Wagner's Law for six countries, based on Cointegration and Error-Correction modelling techniques. *Applied Economics*, *34*(9), 1157–1169.

Dornbusch, R., Fischer, S., & Startz, R. (2017). *Macroeconomics*. 13th Ed, New York: McGraw Hill.

Ezirim, C., Moughalu, M., & Elike, M. (2008). Inflation versus public expenditure growth in the US: An empirical investigation. *North American Journal of Finance and Banking Research*, *2*(2), 26–40.

Fan, S., & Rao, N. (2003). Public spending in developing countries: Trends, determination and impact. *EPTD Discussion Paper* No. 99, EPTD.

Gatauwa, J.M, Kaijage, E.S., Sifunjo, K., & Kiriti-Nganga, T.W. (2017a). Fiscal policy stance and public expenditure in Kenya. *The Pan-African Journal of Business and Management*, *1*(2), 61–80.

Gatauwa, J.M., Kaijage, E.S., Sifunjo, K., & Kiriti-Nganga, T.W. (2017b). The intervening influence of economic growth on fiscal policy stance and public expenditure in Kenya. *The Pan-African Journal of Business and Management*, *1*(2), 21–27.

Huang, C.J. (2006). Government expenditures In China and Taiwan: Do they follow Wagner's Law? *Journal of Economic Development*, *31*(2), 139–148.

Kumar, S., Webber, D. J., & Fargher, S. (2012). Wagner's law revisited: Cointegration and causality tests for New Zealand. *Applied Economics*, *44*(5), 607–616.

Legrenzi, G. (2004). The displacement effect in the growth of governments. *Public Choice*, 120, 191–204.

Haffert, L., & Mehrtens, P. (2015). From austerity to expansion? Consolidation, budget surpluses, and the decline of fiscal capacity and the size of government. *Politics & Society*, *43*(1), 119–148.

Han, S., & Mulligan, B. (2008). Inflation and the size of government. *Federal Reserve Bank of St. Louis Review*, *90*(3), 245–267.

Henry, O. & Olekalns, N. (2000). The Displacement Hypothesis and Government Spending in the United Kingdom: Some New Long-Run Evidence. *The University of Melbourne Working Paper* No. 750.

Johansen, L. (1965). *Public Economics.* Amsterdam: North Holland Publishing Co.

MacKinnon, D.P., Lockwood, C., Hoffman, J., West, S., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83–104.

Magazzino, C. (2011). The nexus between public expenditure and inflation in the Mediterranean countries. *MPRA Paper* No. 28493, MPRA.

Musgrave, R. (1959). *The Theory of Public Finance*. New York: McGraw-Hill.

Njeru, J. (2003). The impact of foreign aid on public expenditure: The case of Kenya. *AERC Research Paper* No. 135, AERC.

Peacock, A., & Wiseman, J. (1961). *The Growth of Public Expenditure in the United Kingdom*. Princeton: Princeton University Press.

Perotti, R. (2007). Fiscal policy in developing countries: a framework and some questions. *World Bank Research Working Paper* No. 4365, World Bank.

Remmer, K. (2004). Does foreign aid promote the expansion of government? *American Journal of Political Science*, *48*(1), 77–92.

Sabir, S., & Qamar, M. (2019). Fiscal policy, institutions and growth: Evidence from the developing Asian countries. *International Journal of Social Economics,* 46(6): 822–837.

Stancik, J., & Valila, T. (2012). Changes in the fiscal stance and the composition of public spending. *Empirical Economics*, 43, 199–217.

Tanzi, V. (2006). Fiscal policy: When theory collides with reality. *CEPS Working Document* No. 246, CEPS.

Tayeh, S., & Mustafa, M. (2011). The determinants of public expenditures in Jordan. *International Journal of Business and Social Science*, *2*(8), 45–49.

Tsai, P.H. (2014). State fiscal rules and composition changes in public spending before the election. *Public Finance Review*, *42*(1), 58–91.

UNCTAD (2010). *The financial crisis, macroeconomic policy and the challenge of development in Africa*, Geneva.

Wagner, A. (1863). Grundlegung der politischen ökonomie. Retrieved from http://www.google.com.

APPENDIX: *TABLES AND FIGURES*

Table 1A. VECM Model of Fiscal Policy Stance and Public Expenditure

D(PEXP) = C(1)*(PEXP(-1) - 1.03485617939*TAX(-1) + 1.23422707728E-07*BDEFIC(-1) - 0.150503713201) + C(2) *D(PEXP(-1))

+ C(3)*D(PEXP(-2)) + C(4)*D(TAX(-1)) + C(5) *D(TAX(-2)) + C(6)*D(BDEFIC(-1)) + C(7)*D(BDEFIC(-2)) + C(8)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.251640	0.270345	-0.930811	0.3577
C(2)	-0.253809	0.224387	-1.131122	0.2649
C(3)	-0.007484	0.205753	-0.036373	0.9712
C(4)	-0.003788	0.190341	-0.019899	0.9842
C(5)	-0.157971	0.156606	-1.008717	0.3193
C(6)	-1.41E-06	1.02E-06	-1.377510	0.1762
C(7)	5.87E-08	1.05E-06	0.056019	0.9556
C(8)	0.211818	0.048616	4.357002	0.0001

R-squared	0.128431	Mean dependent var	0.142247
Adjusted R-squared	-0.028004	S.D. dependent var	0.122805
S.E. of regression	0.124513	Akaike info criterion	-1.174978
Sum squared resid	0.604633	Schwarz criterion	-0.860059
Log likelihood	35.61198	Hannan-Quinn criter.	-1.056472
F-statistic	0.820986	Durbin-Watson stat	1.974580
Prob(F-statistic)	0.575843		

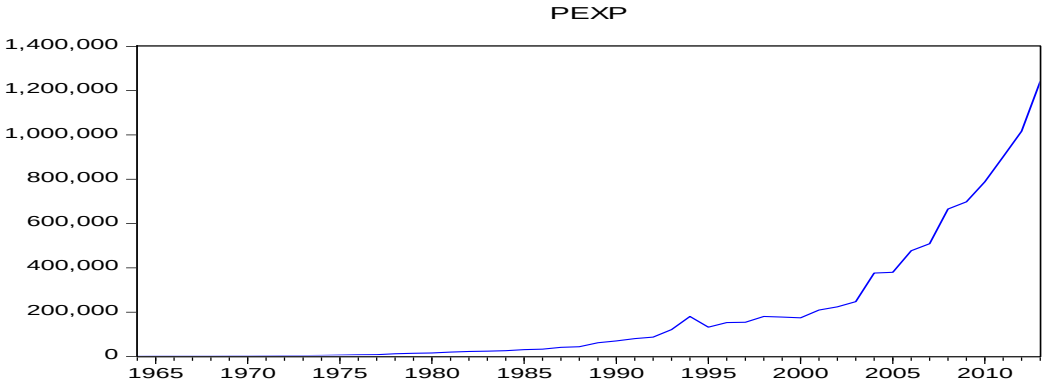
Table 2A. Joint Significance Test

	Test Statistic	Value	df	Probability
Budget deficit and Inflation rate	Chi-square	1.824088	3	0.6097
Budget deficit and tax	Chi-square	3.872157	3	0.2756
Tax and budget deficit	Chi-square	8.684858	3	0.0338
Budget deficit and Unemployment rate	Chi-square	0.080582	1	0.7765
Tax and Unemployment Rate	Chi-square	0.004018	1	0.9495
Budget deficit and tax	Chi-square	6.24E-06	1	0.9980
Tax and budget deficit	Chi-square	3.343580	1	0.0675

Table 3A. Wald Test

	Test Statistic	Value	df	Probability
Tax on Foreign aid & grants	Chi-square	0.012295	1	0.9117
Budget deficit on Foreign aid & grants	Chi-square	0.226297	1	0.6343
Tax on Public expenditure	Chi-square	1.182758	1	0.2768
Budget deficit on Public expenditure	Chi-square	4.926113	1	0.0265
Inflation on Public expenditure	Chi-square	1.620703	1	0.2030
Unemployment on Public expenditure	Chi-square	0.861832	1	0.3532
Foreign aid & grants on Public expenditure	Chi-square	6.989978	1	0.0082

Figure 1A: Annual Public Expenditure



Source: Kenya National Bureau of Statistics Reports

Relationships Among Job satisfaction, Organizational Affective Commitment and Turnover Intentions of University Academicians in Tanzania

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Abstract: *Universities play a pivotal role in any country's economic development goal by creating the required human capital, generating and preserving knowledge, and by offering technical advisory services to businesses and communities. Effective and efficient performance of this role depends largely on the quantity and quality of their satisfied and committed academic staff. Universities in Africa, Tanzania in particular, are suffering from low academic staff capacity. Yet such low capacity is further threatened by high rates of turnover. To manage this threat, universities need to manage not only the turnover of their academic staff but also their turnover intentions. Turnover intentions are the best predictor of actual turnover. Managing this threat requires among other things, an understanding of the predictors of turnover intentions. The purpose of this study was to analyze the relationship between two job attitudes (job satisfaction and affective commitment) and the behavioural outcome of turnover intentions. Data was collected through a survey administered on 300 academicians conveniently selected from five public universities in Tanzania and analysed through descriptive statistics, multiple regression analysis, and the Hayes' Process Tool v.3.4.1. Both job satisfaction and affective commitment statistically negatively predicted turnover intentions, even after controlling for the influence of tenure and education qualifications. Affective commitment significantly but partially mediated the job satisfaction – turnover intentions relationship. It is therefore recommended that universities should have in place work systems that are pro-job satisfaction to reduce turnover intentions among the academicians. Moreover, coupling these efforts with measures capable of enhancing affective commitment adds value in managing turnover intentions.*

Keywords: Job Satisfaction, Affective Commitment, Turnover Intentions, Mediation, Academicians.

Introduction

Universities play a pivotal role in any country's socio-economic development through their key functions of teaching and learning, research, and consultancy. However, universities' excellence in accomplishing this role largely depends on the quality and quantity of their academic staff. The reality on the ground is that the number of academic staff in many African universities, and Tanzania in particular, has been shown empirically to be quite inadequate (Bisaso, 2017; Nyahongo, 2015; Tettey, 2010; URT, 2010). Part of this inadequacy has been blamed on academic staff turnover, particularly voluntary turnover. For example, the turnover rate of academicians in South Africa has been reported to be in the range of 5 to 18 percent (Pienaar and Bester, 2008). In Uganda, 160 out of 1502 left Makerere University in one year – 2011-2012 (Bisaso 2017). The situation in Tanzania is not any better. Nyahongo (2015), for example, reported that 102 out of 840 academicians left the University of Dodoma between 2009 and 2013. Yet another study by Mkumbo (2014) reported the proportion of academicians reporting their desire to leave their job for alternative careers to be at 34.8 percent at St John's University, 39.3 percent at Tumaini University, 39.1 percent at University of Dodoma and 45.5 percent at University of Dar es Salaam. Among the reasons given in the study included the rise in workload and work stress coupled with reduced work autonomy.

Employee turnover is a behavioural outcome that threatens the sustainability of organizations including universities. It challenges human resource managers in their quest to contribute to organization performance (Davidson et al., 2010). Turnover rates in organizations, particularly in universities, negatively affect service quality and productivity (human capital development and knowledge creation), due to loss of knowledge and technical skills. Research has identified five costs associated with employees' turnover. These include, but not limited to, pre-departure costs such as severance costs, recruitment costs, selection, orientation and training costs, and productivity loss costs (Tracey and Hinkin, 2008; Weisberg and Kirschenbaum, 1991). Aldhuwaihi et al. (2012) add to the list, the costs associated with disruption of working teams, knowledge loss, loss of motivation/morale by the remaining employees, as well as the individual's costs associated with loss of seniority and disruption of social life.

For universities, the costs include excessive workload, administrative time to re-schedule lectures and tutorials, the opportunity cost of the time spent on additional classes (e.g. in the form of research and consultancy income lost), and the costs associated with obtaining approvals to hire new staff. Besides, Lambert and Hogan (2009) point out the cost associated with the loss of social networks and loss of quality of services. The institutions' reputation is also likely to suffer as the public may view the rate of academicians' turnover as a sign of a bad organization. Conversely, employees' turnover could be a positive organisational outcome as it allows the organisation to hire new, but more trained and talented employees to replace those who left. Luz et al. (2018) point out more positive outcomes as oxygenation of the organization, reduction of conflicts, increased internal mobility, and stimulation of innovation.

The aforementioned negative and positive outcomes of turnover, call for optimal management, not only of the level but also of the antecedents of turnover intentions to ensure the levels are

appropriate and the negative consequences are minimized (Phillips and Connell, 2003). Several past studies linked turnover intentions to job attitudes as their possible antecedents. Some examined job satisfaction (e.g. Masum et al., 2016), and others examined organizational commitment (e.g. Jonathan, Thibeli, and Darroux, 2013). Yet other studies examined both job attitudes (e.g. Kanwar et al., 2018 and Luz et al., 2018). Also, some examined the link between job satisfaction and organizational commitment (Jonathan, Darroux, and Massele, 2013; Jonathan, Darroux, and Thibeli, 2013). The results, however, are not entirely consistent.

Investigation of these two job attitudes in Tanzania as predictors of turnover intentions is lagging. The few studies on the job satisfaction – turnover intentions link cover the education, health and banking sectors (Amani and Komba, 2016; Jonathan Thibeli and Darroux, 2013; Blaauw et al., 2013; Ngatuni and Matolo, 2018). Although they all consistently reported a negative and significant effect of job satisfaction on turnover intentions, only Amani and Komba's study examined university academic staff. Overall, none of them looked at the two job attitudes together as predictors of turnover intentions. The job satisfaction – organizational commitment link is examined by Jonathan, Darroux, and Massele, 2013; Jonathan, Darroux, and Thibeli, 2013) and both studies reported a significant positive relationship. Amani and Komba (2016), Blaauw et al. (2013) and Ngatuni and Matolo (2018) on the other hand, examined the link between job satisfaction and turnover intentions and reported a significant negative relationship. According to Field (2018), when there are three variables, A, B and C, with A affecting B and C and at the same time B affecting C, a fertile avenue for possible mediation is presented. The results summarized here suggest that job satisfaction affects both organizational commitment and turnover intentions, and at the same time organizational commitment affects turnover intentions. This situation suggests a possible mediation of organizational commitment in the job satisfaction-turnover intentions relationship. However, this possibility has not been investigated in Tanzania.

This study, therefore, analysed the relationships among academicians' job attitudes of job satisfaction, and organizational affective commitment as well as the outcome of intention to leave their respective universities. The objective being to determine whether the academicians' level of turnover intentions is predicted by the two job attitudes of job satisfaction and organizational commitment. Besides, the study assessed whether the effect of job satisfaction on turnover intentions is mediated by organizational commitment. Lastly, the study established whether job satisfaction and organizational affective commitment have a unique effect on the turnover intentions after controlling for the effect of tenure and educational qualifications, the two demographic variables believed to shape academicians desire to quit, as suggested by the side bets theory (Becker, 1960)

The study borrowed a leaf from the social exchange theory (Blau, 1964; Homans, 1958) to achieve its objectives. According to this theory, there exists a reciprocal relationship between two parties, which create obligations in response to the beneficial acts of the other part. The study argues that the academicians' turnover intentions may reduce and affection increase as a reciprocal response to the satisfaction they draw from the job and the university (employer). That is, when academicians feel that their university is engaged actively in policies and human resource management practices that give them satisfaction with their job, they may feel obligated

to reciprocate that treatment. Among the ways in which they may do so is by committing emotionally and affectionately to the university, which in turn lowers their intentions to leave the university. This happens because the reciprocal exchanges between them and their employer are important components of the social exchange. Besides, the training and development of academicians take heavy investment in terms of time, energy and money. This coupled with some attitude outside the university community that a doctoral qualification is more fitting for university teaching, makes the turnover decision difficult, not because of satisfaction with the job but because of the value of the potential losses (side bets) the academicians may suffer should they decide to leave their university's academic post. Thus, Becker's (1960) side bets theory is also brought in to assess the effect of tenure and education qualifications first as predictors of turnover intentions and secondly as control variables, so that the unique contribution of job satisfaction and affective commitment is estimated free of the influence of these two demographics.

The study contributes to the turnover intentions' literature in higher education in several ways. It contributes empirical evidence from a frontier market on (i) the job attitudes of job satisfaction and organizations commitment as predictors of turnover intentions (ii) organizational commitment as a mediator in the relationship between job satisfaction and turnover intentions; and (iii) unique contribution of the two job attitudes (job satisfaction and organizational commitment) after controlling for the influence of tenure and educational qualification. In doing these, the study also contributes evidence in support of the social exchange and side bets theories.

Literature Review

This section reviews theory and previous research on job attitudes (job satisfaction and organizational commitment) – turnover intentions relationship, and end up developing seven (7) hypotheses to test. A conceptual framework pictorially portraying those hypotheses is also presented. The results of the review are also used to benchmark the study's findings to highlight its contributions. It begins with conceptual definitions.

Turnover Intentions

Turnover has been defined in the literature as the willingness of an employee to leave the organization and move to another organization. It can be viewed as a two-sided sword (Ekhsan, 2019) – as a withdrawal behaviour but also as an individual's right of choice. Both views are what Price and Mueller (1986) refer to as voluntary turnover – an employee's choice to leave the job or the organization. The other type is the involuntary turnover which refers to an employee's removal from his job by the employer. Irrespective of the type, turnover has potential direct and indirect cost consequences, as well as some positive benefits to the organization. For a good discussion of these consequences of turnover, Weisberg and Kirshenbaum (1991), Maertz and Campion (1998), Lambert and Hogan (2009), and Luz et al. (2018) are good reads. However, research for many years focused on turnover intentions than the actual turnover behaviour, the advice of which can be traced as far back as to the works of Dalession et al. (1986: 261) and

Steele and Ovalle (1984). These two studies have shown turnover intentions as the best predictor of actual turnover, drawing from Fishbain and Ajzen's (1975) theory of reasoned action. The theory suggests that the best single predictor of an individual's behaviour is the individuals' intention to perform the behaviour in question. Turnover intentions refer to the cognitive process of thinking of quitting, planning on leaving a job, and the desire to leave the job (Mobley et al., 1979). Turnover intentions are preferred over the actual turnover for their benefits to organizational managers. Not only turnover intentions are easy to measure but they can also be measured more accurately. In addition, understanding the level of turnover intentions among employees is beneficial because it is possible to influence the minds of the employees before they leave than when they have already left the organization. Martz et al. (2013) note that turnover intent is undesirable even if it does not culminate into actual turnover because persons who desire to leave are often less likely to contribute meaningfully to the organization than those who don't. This study, therefore, focused on academicians' intentions to leave their universities – turnover intentions.

Organizational Commitment

Organisational commitment is defined as "the strength of an individual's identification with, and involvement in, a particular organisation" (Porter et al., 1974, p. 604). It has three dimensions suggested and defined by Meyer and Allen (1991) as follows: (i) Affective commitment which is defined as the state in which an employee wants to stay with an organisation as a result of the "emotional attachment to, identification with, and involvement in, the organisation"; (ii) Continuance commitment - the feeling of being "stuck" leading to a decision to stay with an organisation because it is too costly to leave; and (iii) Normative commitment - the feeling of a moral obligation to remain with the organisation.

Researchers and practitioners alike have developed an interest in understanding the antecedents of organisational commitment and its dimensions because of its linkage to key organisational outcomes, including employee turnover intentions (Chughtai and Zafar, 2006; Jonathan et al., 2013). The present study focused on the affective commitment dimension because, in academics, academicians develop affection and emotional attachment to their university jobs as well as the university itself: especially the longer they stay and the higher the academic credentials they attain. The choice of affective commitment was also due to its dominance in the organizational commitment literature (Jaros, 1993).

Job Satisfaction

Locke (1969) defines job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's job values" and job dissatisfaction as the unpleasurable emotional state resulting from the appraisal of one's job as frustrating or blocking the attainment of one's job values" (p.317). Satisfaction, therefore, is achieved when employees strike an evaluative balance between their expectations from a job and what that job offers them. A satisfied employee is expected to develop positive attitudes and to bring desirable work values into the organization, which in turn leads to enhanced efficiency and productivity (Kanwar et al., 2018). In addition, job satisfaction has been viewed as an important job attitude because of its

consequences in the organization such as lower turnover intentions, lower absenteeism, and higher organizational commitment, to mention a few.

Relationship Between Job Satisfaction, Affective Commitment and Turnover Intentions

The job satisfaction-turnover intentions link has attracted more research than the other two links i.e. job satisfaction – organizational commitment and organizational commitment – turnover intentions. On the first link, Hellman's (1997) meta-analytic study reported that the relationship between job satisfaction and intent-to-leave was consistently negative. Subsequent studies (Abu Raddaha et al., 2012; Masum et al., 2016) reported similar results. On the other hand, studies on the job satisfaction - organizational commitment (Chordiya et al., 2017; Gunlu et al., 2010; Markovits et al., 2010; Oztuck et al., 2014; Saridakis et al., 2018), reported a consistently positive and significant relationship between job satisfaction and organizational commitment. On the organizational commitment – turnover intentions link, Addae et al. (2006) and Mohamed et al. (2006) reported consistent results showing that affective organizational commitment statistically significantly negatively impacted on turnover intentions. These results are therefore consistent with the notion that committed employees are less likely to leave the organization than those who are not (Meyer et al., 2002)

In Tanzania, several studies have examined the job satisfaction - turnover intentions link (Amani and Komba, 2016; Blaauw et al., 2013; Jonathan, Thibeli and Darroux, 2013; Ngatuni and Matolo, 2018). While only Amani and Komba examined the link in universities, the rest examined it on samples of nurses, secondary school teachers, and bankers, respectively. However, they all reported negative and significant effects of job satisfaction on employees' turnover intentions. Also, several other studies examined the link between job satisfaction and organizational commitment (Jonathan, Darroux, and Massele, 2013; Jonathan, Darroux, and Thibeli, 2013). Both were based on a sample of secondary school teachers and reported a positive and significant effect of job satisfaction (intrinsic and extrinsic) on organizational commitment, the extrinsic job satisfaction being the strongest predictor of organizational commitment. Hokororo and Michael (2019) on the other hand examined intention to stay (the opposite of intentions to leave) of universities academic staff but linked it to job embeddedness. Therefore, an examination of the link between organizational commitment and turnover intentions in Tanzania lagged, and so are the studies examining the relationship between the three variables, including the mediation possibilities.

Studies elsewhere (Kanwar et al., 2018; Lambert 2006; Luz et al. 2018; Tnay et al. 2013; Tubay, 2019), examined the relationship among job satisfaction, organizational commitment and turnover intentions, to determine whether job satisfaction and organizational commitment predicted turnover intentions. Industries covered include ICT, manufacturing industry, accounting professional, hotels, correctional facilities staff, and so on, and in countries like Brazil, Philippines, Indonesia, Malaysia, India and US. Overall, the empirical evidence shows that both job satisfaction and organizational commitment significantly negatively predicted turnover intentions. One exception is Tnay et al. (2013) who reported an insignificant effect of organizational commitment. Moreover, the results of a meta-analysis study, by Griffeth et al. (2000), suggest that organizational commitment predicts turnover intentions better than job satisfaction does. This relative position of organizational commitment as the strongest predictor

of turnover intentions is subsequently supported by such studies as Kanwar et al. (2018), Lambert and Hogan (2009) and Luz et al. (2018). The only exception is Lambert (2006) who reported the converse. Kanwar et al. (2018) argue that job satisfaction may be a more distal variable of turnover intent than organizational commitment proposing that job satisfaction would affect organizational commitment first, which in turn will affect turnover intentions. They argue that satisfied employees will demonstrate greater commitment and this commitment will then lead to reduced turnover intentions. According to Field (2018), the aforementioned evidence presents an avenue for mediation. Also, other studies (e.g. Lambert and Hogan, 2009) have suggested that organizational commitment takes longer to develop than job satisfaction, despite the unresolved debate about the causality of job satisfaction – organizational commitment relationship (see, for example, Vandenberg and Lance, 1992). This suggests that job satisfaction occurs faster than organizational commitment, creating a possible indirect route to turnover intentions via organizational commitment. However, fewer researches have been directed towards the assessment of this possibility.

Two pieces of research have examined the mediation of organizational commitment in the relationship between job satisfaction and turnover intentions in Bali, Indonesia (Devyanti and Satrya, 2020; Dharmayanti and Sriathi, 2020). Both studies found job satisfaction and organizational commitment having a significantly negative effect on turnover intentions while job satisfaction positively and significantly affecting organizational commitment. Using the Sobel test, both studies found that organizational commitment mediated partially but significantly on the effect of job satisfaction on turnover intentions. These findings are consistent with those of an earlier study by Lambert and Hogan (2009). Thus, the mediation testing is lagging not only globally, but in Tanzania and more specifically in the higher education sector.

Controlling Variables

Demographic variables have been used in previous researches for several purposes; (i) to assess the unique contributions of the variables of interest in explaining the variance in the dependent variable (as control variables); (ii) to describe the study's sample; and (iii) to evaluate the generalizability of the findings (El-Dief and El-Dief, 2019). However, this study considered only tenure and education qualification as control variables, leaving the rest for sample description. A positive and statistically significant effect of education level on turnover intentions has been reported in previous researches (Cotton and Tuttle, 1986; Lambert, 2006; Emiroğlu et al., 2015; Masum et al., 2016). One common message from these studies is that employees with higher levels of education – e.g. college degree tend to report significantly lower levels of turnover intentions than those with lower education levels. For academicians, the division between high and low academic qualification is within the higher education group (with or without doctorate). In this case, the differences in the turnover intentions may results from the view that holding a doctorate represents a high level of individual and institutional investment in one's training and development. These investments raise the perceived loss that academicians may have to endure should they decide to quit their job. While this position is consistent with Becker's (1960) side bets theory, it does not rule out the alternative view that higher qualification may reduce the perceived costs of leaving because it gives the employees more opportunities and employment alternatives, fueling higher turnover intentions (Zwan et al., 2012). However, in Tanzania, the

latter view may not hold well with doctorate holders, leading to lower turnover intentions among them.

This latter view is also consistent with the contextual beliefs in many countries in Africa that doctorate degrees are for the university lecturers. Holders of doctorate qualifications within universities, therefore, may view careers outside universities as a career which will not earn them compensation commensurate to their investment. It is likely therefore that among university academicians, turnover intentions will be negatively related to education qualification.

Tenure refers to the length of time an employee has been working for the current employer. The longer one stays on a job, the stronger his ability to evaluate the organization's situation more rigorously and come up with informed decision including the decision to quit (Puran and Sahadar, 2008). Similarly, the longer an employee works for an organisation, the higher the chances that he will develop an emotional attachment to it making the decision to quit more difficult (Khan et al., 2013). With time employees tend to develop work and social networks, a better understanding of the work systems, as well as job – and organization-specific coping mechanisms. All these outcomes add to the value of the side bets. This value grows with the time one spends in the organization, and subsequently, it contributes to the hardship in contemplating quitting. Empirical support for this position is found in various studies including those of Cameron et al. (1994) and Masum et al. (2016).

From the aforesaid, it is suggested that the two demographic variables also influence the academician's turnover intentions. The two variables also work in tandem in the academician's training and development process. Training to doctorate level requires one to have spent considerable time on the job and in the university. Hence controlling for the influence of education and tenure in the prediction of turnover intentions is warranted to unearth the unique contribution of the two job attitudes. Figure 1 presents the hypothesised relationships among job attitudes and turnover intentions as well as the two demographic characteristics.

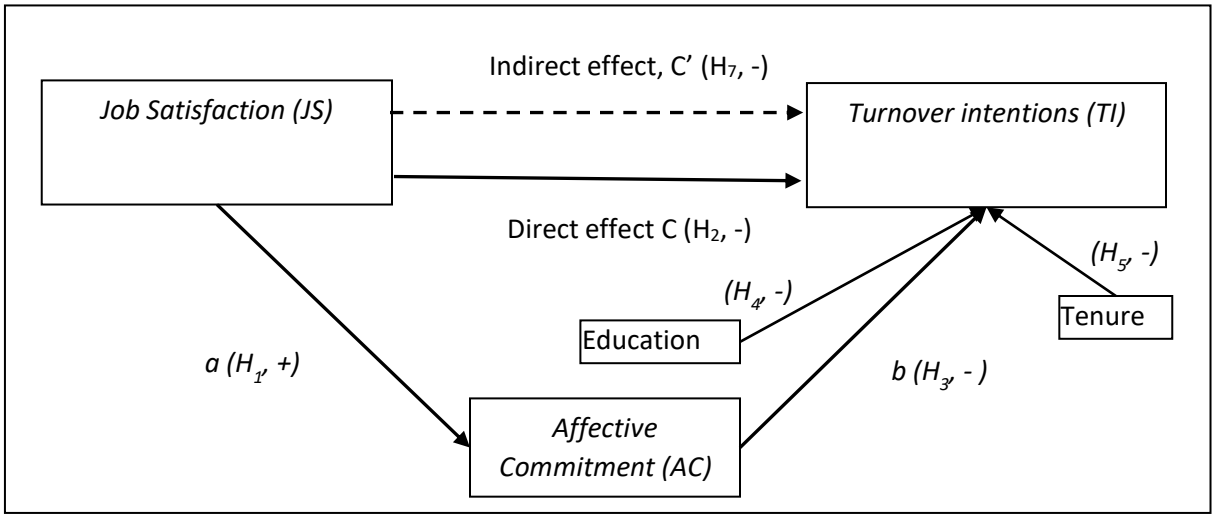

Figure 1. Conceptual Model

From the literature review presented, and the resulting conceptual model, the following hypotheses were specified and tested:

H1. Job satisfaction will have a positive and significant effect on affective commitment

H2. Job satisfaction will have a negative and significant effect on turnover intentions

H3. Affective commitment will have a negative and significant effect on turnover intentions

H4. Education qualification will have a negative and significant effect on turnover intentions

H5. Tenure will have a negative and significant effect on turnover intentions

H6. Job satisfaction and affective commitment will have a negative and significant effect on turnover intentions after controlling for the influence of education qualification and tenure

H7. Affective commitment will mediate significantly in the relationship between job satisfaction and turnover intentions

Methodology

A cross-sectional descriptive research design was adopted. A survey strategy was used to collect the primary data required to confirm the hypotheses. Participants were drawn from selected public universities. As of January 2020, there were 43 university institutions in Tanzania – 30 Universities (12 public and 18 private) and 13 university colleges (4 public and 9 private) (TCU, 2020). The study focused on public universities, and based on size, only the big universities were targeted – namely University of Dar es Salaam (UDSM), Sokoine University of Agriculture (SUA), The Open University of Tanzania (OUT), Muhimbili University of Health and Allied

Sciences (MUHAS) and Mzumbe University (MU). These universities were selected purposively as universities with not only a significant number of academicians but also a mixture of short and long-serving academicians. Convenience sampling technique was used to select academicians from each University. The technique was chosen because of its ability to mitigate the challenges of accessibility/availability of academicians given the nature of their work schedules (Etikan et al., 2016). Some could be on long study leave, some on short training or attending seminars and conferences, while others could be on other university activities like conducting research and consultancies outside the universities on the days of the visit. Thus, academicians who were found in their offices and willing to participate were given the questionnaires to fill and leave them at an agreed-upon point for later collection. They were fully informed that (i) their participation was voluntary; (ii) all of their responses would be confidential; and that (iii) the results of the analysis would be reported in aggregate terms. In total 300 questionnaires were distributed.

Variables and Their Measurement

Turnover intentions: was measured by five items (all positively worded) adapted from previous studies – three from Wayne et al. (1997), also used in Villanueva and Djurkovic (2009). Sample items were "As soon as I can find a better job, I'll leave my university" and "I am actively looking for a job outside my place of employment." Academicians responded to these items on a 7-point scale ranging from strongly disagree (1) to strongly agree (7).

Affective Commitment: was measured by eight items (four of them negatively worded) adapted from Allen and Meyer (1991). Sample items were "I would be very happy to spend the rest of my career with this university", "I really feel as if this university's problems are my own" and, "I think that I could easily become as attached to another university as I am to this one" (negatively worded). Academicians responded to these items on a 7-point scale ranging from strongly disagree (1) to strongly agree (7).

Job satisfaction: was measured using five-items (one of them negatively worded) adapted from Brayfield and Rothe's (1951) job satisfaction scale. Sample items included "I feel fairly well satisfied with my present job" and "I consider my job rather unpleasant". Academicians responded to these items on a 5-point scale ranging from strongly disagree (1) to strongly agree (5).

Finally, several demographic characteristics – age, gender, marital status, job rank, administration workload (all categorical) were added to describe the sample. In addition, following the suggestions of Becker's (1960) side bets theory in relation to commitment and turnover intentions, tenure (continuous) and educational qualification (categorical) were added as control variables. To fit into the regression model as a predictor variable, the educational qualification which was measure in four levels was dichotomised into 1 if the participant held a doctorate, 0 otherwise.

Data Analysis

Two hundred and twenty-three (223) filled questionnaires were returned (74.3 percent response rate). These were inspected, responses coded and entered into IBM SPSS Statistics software V.23. Descriptive statistics (Frequency distribution) were run to check for errors in data entry. Using the negatively worded items in affective commitment and job satisfaction as attention traps and standard deviation statistics, 32 unengaged cases were identified and removed from the sample, leaving 191 cases. Missing values were identified in 16 of the variables (all below five percent) and were imputed by a median of the nearby points. The negatively worded items were then reverse-coded followed by a scale test for reliability analysis, which returned Cronbach's αs of .706 for the turnover intentions scale, .714 for affective commitment sale (further optimized to .746 after deletion one item "I think that I could easily become as attached to another university as I am to this one") and .626 for the job satisfaction scale (further optimized to .723 after deletion of one item "I consider my job rather unpleasant"). For each participant, mean scores were obtained by averaging the scale items' scores by the number of the items retained for subsequent analyses.

Hypotheses testing was done using multiple regression analysis while the mediation effect was tested using Andrew Haye's *Process Tool v. 3.4.1* (Hayes, 2019) plug-in to IBM SPSS Statistics. The effect size and the significance of the indirect effect were assessed using Preacher and Kelley's (2011) K^2 and Sobel test, respectively, where K^2 has cut-offs of .01, .09, and .25 for small, medium and large effect respectively. The underlying assumptions – normality, linearity, outliers, no multicollinearity (additivity), and homoscedasticity were checked. Linearity assumption was tested through normal p-p plot followed by correlation between Turnover intentions and affective commitment ($r = -.494$, $\rho < .001$) and job satisfaction ($r = -.458$, $\rho < .001$) against the recommended minimum of $r = .3$ (Pallant, 2016), representing moderate correlation (Cohen, 1988). Thus, the linearity assumption was not violated. The data passed the outlier test by returning a maximum Mahalanobis Distance of 10.18, which was lower than the maximum cut-off distance of $\chi^2_{(2)} = 13.82$, $\rho < .001$ (Tabachnick and Fidell, 2019). The data also passed the no multicollinearity problem assumption test by having the highest Pearson product-moment correlation coefficient among the predictor variables ($r = .54$, $\rho < .001$), which was lower than the maximum recommended of .7 (Pallant, 2016). Beyond this cut-off value, a multicollinearity problem would have been suspected in the data. This test was followed by variance inflation factors (VIF) lower than 1.5. Rogerson (2001) recommends a maximum cut-off of = 5.0. However, the data slightly failed one of the two homoscedasticity assumption tests (using Ahmad Daryanto's plugin for IBM SPSS statistics) as Breusch Pagan was $\chi^2 = 6.39$, $\rho = .041$ and Koenker was $\chi^2 = 4.21$, $\rho = .12$). Consequently, the study reported the regression estimated based on heteroscedasticity robust standard errors (HC03) after controlling for this heteroscedasticity problem.

Results and Discussion

Participants' Profile

Results indicated that about eight (8) percent of the participants were young, i.e. 30 years or under, while 65 percent were between 31 and 50 years, leaving 26.7 percent in the > 50 years age group. The sample was dominated by male participants (74 percent), typical of the gender profile of universities' academic staff. The majority (87 percent) had family responsibilities (married) and about 10 percent were single. There was a fifty-fifty split between PhD holders and those with Masters Degrees or lower (first-degree holders making only nine percent of the total sample). Fifty-nine percent were in the lecturer's rank or higher (with Professors making only 14.4 percent of the total sample). Lastly, about 30 percent of the participants held administrative responsibilities, 57 percent of them holding heads of department position. Participants had been on their job for a period ranging from one to 43 years (M = 12.67, S.D. = 8.6) (Table 1).

Descriptive, Reliability and Correlation Statistics

Descriptive and scale test for reliability analyses were performed to describe the data and test for internal consistency of the measurement scales, respectively. Moreover, correlation analyses were performed to test for both the linearity and no-multicollinearity assumptions. The two control variables – tenure and education qualification were also added. In the results (Table 1), affective commitment had a higher mean score than turnover intentions (same response range). Academicians with doctorate qualification had statistically significantly lower turnover intentions (M = 2.65, SD = 1.30) than those without it (M = 3.37, SD = 1.32, t(188) = - 3.76, $\rho <$ .001). They also had a significantly higher job satisfaction (M= 3.41, SD = .90) than those without the doctorate qualification (M = 3.05, SD = .92, t(188) = 2.70, ρ = .008). However, the affective commitment did not differ significantly between the academician with doctorate (M = 4.80, SD = 1.23) and those without it (M = 4.65, SD = 1.10, t(188) = .90, ρ = .37). Both job satisfaction and affective commitment had r = - .46, $\rho <$ .001 and r = - .49, $\rho <$ .001, respectively, with turnover intentions. These cut-offs were within the range of .3 to .49 (Cohen, 1988) indicating their significant moderate correlation with turnover intentions. They also indicated that the linearity assumption was met. These coefficients were very similar to those reported for job satisfaction (- .410 to - .434) and organizational commitment (- .449 to - .485) in the previous researches by Devyanti and Satrya (2020), Kanwar et al. (2018) and Lambert and Hogan (2009). Turnover intentions were significantly negatively correlated with tenure (r = - .237, ρ = .001) and educational qualification (r = - .265, $\rho <$ .001). Job satisfaction was significantly positively corelated with tenure (r = .173, ρ = .017) and education (r = .193, ρ = .008). Job satisfaction and affective commitment were significantly positively correlated (r = .54, $\rho <$ .001) and so were tenure and education (r = .563, $\rho <$ .001). Finally, the affective commitment was positively correlated with both tenure (r = .104, ρ = .152) and education (r = .065, ρ = .370), but neither of the relationships was significant. The correlation coefficients of all these independent variables were lower than the maximum of r = .9 beyond which a serious multicollinearity problem would be suspected in the data (Pallant, 2016). All Cronbach's α_s were above α = .7 showing that each of the measurement scales had acceptable internal consistency (George and Mallery, 2019; Hair et al., 2019).

Table 1. Descriptive, Reliability and Correlation Results

Variable	M	S.D.	α	1	2	3	4
1. Turnover Intentions *(k = 4)*	3.02	1.35	0.71				
2. Job Satisfaction *(k = 4)*	3.23	0.93	0.72	-.458***			
3. Affective Commitment *(k = 7)*	4.72	1.16	0.74	-.494***	.543***		
4.Tenure	12.67	8.60		-.237**	.173*	0.104	
5. Education				-.265***	.193**	0.065	.565**

***. ρ < .001; ** ρ < 0.01; * ρ < .05 level (2-tailed). *k* = number of scale items retained

Multiple Regression Analysis

Multiple regression analysis techniques were used to test the ability of the two job attitudes of job satisfaction and affective commitment to predict levels of turnover intentions. To control for the heteroscedasticity problems observed in the preliminary analysis, the results are based on heteroscedasticity-robust standard errors. Results (Table 2, Model 1) show that the total variance in turnover intentions explained by the model was 29.5%, F (2, 188) = 38.99, ρ < .001. Both job satisfaction (b = 0.39, t(188) = - 3.36, ρ < .001) and affective commitment (b = 0.40, t(188)= - 4.08, ρ < .001) significantly negatively predicted turnover intentions. In additional, affective commitment with a higher beta value (beta = - .35) had the strongest impact on turnover intentions compared to job satisfaction (beta = - .27). With both education and tenure added (Model 2), the total variance in turnover intentions explained increased to 33.6 percent. Education had a significant negative effect on turnover intentions (b = - 0.43, t = - 2.14, p = .034) and so did tenure but insignificant (b = -.11, t = -.996, p = .32). The position of affective commitment as the main contributor to the variance explained was unchanged.

Table 2. Multiple Regression Analysis Results

	Model 1[a]		Model 2		Model 3					
					Step 1		Step 2		Step 3	
Constant	6.196	***	6.371	***	3.491	***	3.531	***	6.371	***
Job Satisfaction	-0.393	***	-0.324	**					-0.324	**
Affective Commitment	-0.404	***	-0.413	***					-0.413	***
Education			-0.425	*			-0.518	*	-0.425	*
Tenure			- 0.11		-0.037	**	-0.02		-0.011	
R^2	29.5		33.6		0.056		0.081		33.6	
F-Stat.	38.99	***	23.244	***	11.14	**	8.229	***	23.244	***
ΔR^2							0.025		25.4	
ΔF-Stat.							5.072	*	35.231	***

* p < .05; ** p < .01; *** p < .001; [a]based on heteroscedasticity-robust standard errors

Hierarchical multiple regression was used to assess the ability of the two job attitudes (job satisfaction and affective commitment) to predict levels of turnover intentions after controlling for the influence of education and tenure (Model 3). Tenure was added at Step 1, explaining 5.6% of the variance in turnover intentions. Its effect was negative and statistically significant (b = - 0.037, t = - 3.34, ρ < .01). Education was then added at Step 2 and both control variables explained 8.1% of the variance in turnover intentions (b = .52, t = -2.25, ρ = .03, ΔR^2 = 2.5%, ΔF(1,186) = 5.072, ρ = .025). The effect of education was negative and statistically significant, but that of tenure became insignificant. After entering both job satisfaction and affective commitment in Step 3, the total variance explained by the model as a whole was 33.6%, F(4,184), = 23.244, ρ < .001. The two job attitude variables explained an additional 25.4% of the variance in turnover intentions after controlling for the influence of education and tenure; ΔR^2 = 25.4%, ΔF(2,184) = 35.23, ρ < .001. In the final model all the predictors, but tenure, were statistically significant with affective commitment retaining its superior position in explaining the variance in the turnover intentions (beta = - .355, ρ < .001).

Indirect Effect Analysis Results

The indirect effect of affective commitment in the relationship between job satisfaction was estimated using the Process tool v.3.4.1 (Hayes, 2019), the application details of which are well demonstrated in Field (2018). In the results (Figure 2), there was a significant indirect effect of job satisfaction on turnover intentions through affective commitment, *b* = - .28, BCa CI [- .42, - .14]. This represents a relatively medium and significant effect, K^2 = .18, 95% BCa CI [.098, .26], z = - 3.81, ρ < .001. These results indicate that affective commitment partially and significantly mediated the relationship between job satisfaction and turnover intentions. There could, therefore, be other potential mediators to include in the model in addition to affective commitment.

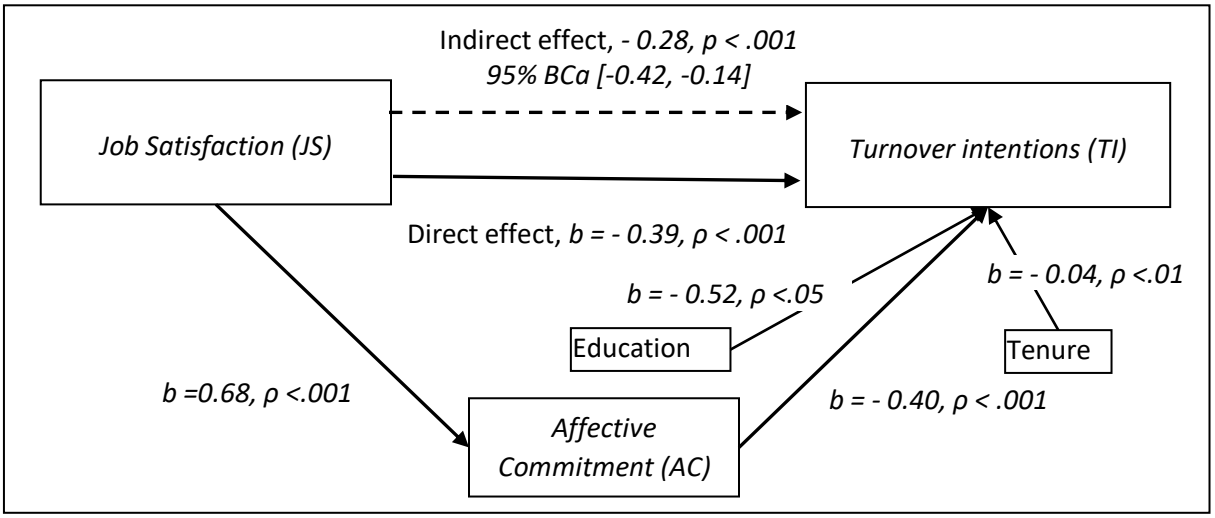

Figure 2. Indirect Effect

Discussion

The present study examined the relationship among two job attitudes (job satisfaction and affective commitment) and one behavioural outcome (turnover intentions) among academicians in five public universities in Tanzania. The objectives were to assess whether the two job attitudes significantly predicted the academicians' turnover intentions, whether demographics (tenure and education qualification) significantly predicted turnover intentions, and whether the two job attitudes had a unique contribution in the prediction of turnover intentions after controlling for the effects of tenure and education qualification. Finally, the study determined whether affective commitment mediated in the relationship between job satisfaction and turnover intentions. Based on the reviewed theoretical and empirical literature, seven hypotheses were developed and tested. All seven hypotheses were supported.

From the results of the descriptive statistics, academicians were found to have moderate turnover intentions, job satisfaction and affective commitment (Albdour, and Altarawneh, 2014). Academicians holding doctorate qualifications reported lower (higher) turnover intentions (job satisfaction) than those who held lower qualifications. Educational level differences in affective commitment were insignificant. Turnover intentions were moderately and significantly correlated with job satisfaction and affective commitment.

Job satisfaction was found to be a significant positive predictor of affective commitment. This finding implies that academicians satisfied with their job are likely to develop emotional attachment and affection to the university, supporting hypothesis H_1. The finding is similar to those reported in previous studies e.g. Ozturk et al. (2014), Chordiya et al. (2017), Jonathan, Darroux, and Massele (2013), and Jonathan Darroux and Thibeli (2013). The study also found that both job satisfaction and affective commitment negatively and significantly affected turnover intentions. Hypotheses H_2 and H_3 are therefore supported implying that both job attitudes are important predictors of the academicians' intentions to leave their universities. The results on the job satisfaction – turnover intentions link and the job satisfaction – organizational commitment link lend support to the social exchange theory which posits that academicians would report a lower intention to turnover as well as more affection and emotional attachment with the university as reciprocation to their feeling of being satisfied with their job. These results are consistent with those reported in Kanwar et al. (2018), Lambert (2006), Luz et al. (2018) and Tubay (2010). In addition, the results of job satisfaction significantly predicting turnover intentions are consistent with those reported in Amani and Komba (2016), Blaauw et al (2013), Ngatuni and Matolo (2018) and Jonathan Thibeli and Darroux (2013) in the Tanzanian context.

Similar to previous studies (Emiroğlu et al., 2015; Lambert, 2006; Masum et al., 2016), turnover intentions differed significantly between doctorate holders and those without, where doctorate holders reported significantly lower turnover intentions. In addition, turnover intentions were negatively and significantly related to tenure. These finding created the need to control for their effect in the estimation of the effect of the two job attitudes on turnover intentions. This was done following the view that academicians may not stay because of their satisfaction or affection and emotional attachment, but because of the value of the perceived side bets which will be lost should they quit. The value of these side bets is expected to grow with the length of service and with the perceived low demand for the doctorate degrees outside universities. Each of these

demographic variables had a significant negative effect on turnover intentions, with education having a significant unique effect after controlling for the effect of tenure. These findings confirmed hypotheses H_4 and H_5. Besides, controlling for the effects of both variables, the findings show that job satisfaction and affective commitment had a unique contribution in predicting the levels of academicians' turnover intentions. These findings confirm hypothesis H_6, indicating that the two job attitudes affect turnover intentions beyond the effects of tenure and education credentials. The finding that affective commitment contributes more than job satisfaction is in line with the turnover literature, e.g. Griffeth et al. (2000), who argued that organizational commitment predicts turnover intentions better than job satisfaction. It may also support the idea that organizational commitment occurs earlier than job satisfaction in a work setting (Kanwar et al., 2018).

The affective commitment was found to significantly, but partially mediate in the relationship between job satisfaction and turnover intentions. These findings, in addition to confirming hypothesis H_7, are consistent with previous studies, for example, Devyanti and Satrya (2020) and Dharmayanti and Sriathi (2020). These findings are new in Tanzania as none had been done on the trio, let alone in the higher education sector. Likewise, the findings on the organizational commitment – turnover intentions link are also new.

Conclusions and Recommendations

Job satisfaction has a positive and significant effect on affective commitment and the two have a negative and significant effect on turnover intentions, with affective commitment contributing the most. The significant effect of the two job attitudes on turnover intentions survived the control of the effects of tenure and academic qualification. Affective commitment only partially but significantly mediated in the relationship between job satisfaction and turnover intentions, which may imply the possibility that there are more mediators than just the affective commitment. Besides, the findings of partial mediation may imply that increasing satisfaction is good for taming turnover intentions, but the outcome would be enhanced if affective commitment-enhancing measures are also stepped up. Moreover, the fact that the four variables only explained under 40 percent of the variance in turnover intentions, more antecedents could be at play.

The study has an important implication for human resource (HR) management practices. The turnover intentions must be managed and monitored in a way that ensures that an appropriate level is attained and its consequences minimized through efficient solution (Philips and Connell 2003). The findings imply that when an academician leaves the university especially a doctorate holder it will take another 8 to 10 years to produce a similarly qualified replacement. Capacity for producing more PhDs, masters and research outputs as well as knowledge generation projects will go with them. HR managers should proactively identify and implement practices that encourage staff to like, and commit to, their jobs and their university. One of the ways to do so is to improve the working environment e.g. rewarding Heads of Department, Faculty/School Deans, and College Principles, who will create a satisfying and empowering environment. Initiatives for academic staff training and development as well as research support are also recommended.

The study is not without limitation. The sample is limited to public universities, leaving out private universities as well as the non-university higher learning institutions. These exclusions limit the generalizability of the result on all universities and more broadly to higher learning institutions. The study tested the prediction of turnover intentions using only two of the key job attitudes. The other job attitudes are job involvement, work engagement, organizational support (supervisory and managerial) (Robbins and Judge, 2018), as well as organizational politics. Future research should consider these extensions to expand on the literature on turnover intentions predictions. An expansion of the number of the mediating variables is encouraged and so is a call for multi-sectoral study. Given the many and important negative consequences of turnover intentions especially among university academicians, a better understanding of the factors that could help tame this potential behaviour is welcome.

Such limitations notwithstanding, this study's findings linking the two job attitudes (job satisfaction and affective commitment), especially the latter, to turnover intentions and the mediation of affective commitment are new, not only to the turnover intentions' literature in higher education but also to a frontier market – Tanzania. The direct effect of job satisfaction on turnover intentions is not eliminated even after accounting for the effects of affective commitment, education and tenure.

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References

Abu Raddaha, A.H., Alasad, J., Albikawi, Z. F., Batarseh, K.S., Realat, E.A., Saleh, A.A., and Froelicher, E.S. (2012). Jordanian nurses' job satisfaction and intention to quit. *Leadership in Health Services, 25*(3), 216-231.

Addae, H. M., Parboteeah, K. P., and Davis, E. E. (2006). Organizational commitment and intentions to quit. *International Journal of Organizational Analysis, 14*(3), 225 - 238

Albdour, A. A., and Altarawneh, I. I. (2014). Employee engagement and organizational commitment: Evidence from Jordan. *International Journal of Business*, *19*(2), 192 - 212.

Aldhuwaihi, A., Shee, H. K., and Stanton, P. (2012). Organisational culture and the job satisfaction-turnover intention link: A case study of the Saudi Arabian banking sector. *World*, *2*(3), 127-41.

Amani, J., and Komba, A. (2016). Relationship between job satisfaction and turnover intention among lecturers in Tanzanian public universities. *Annals of Modern Education, 8*(1), 1-15.

Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology, 66*(1), 32-40.

Bisaso, R. (2017). *Makerere University as a Flagship Institution: Sustaining the Quest for Relevance*, in Teferra, D. Flagship Universities in Africa. Palgrave-Macmillan, Switzerland.

Blaauw, D., Ditlopo, P., Maseko, F., Chirwa, M., Mwisongo, A., Bidwell, P., and Normand, C. (2013). Comparing the job satisfaction and intention to leave of different categories of health workers in Tanzania, Malawi, and South Africa. *Global Health Action, 6*, 127-137

Blau, P. M. 1964. *Exchange and power in social life*. New York: John Wiley.

Brayfield, A. H., and Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307–311.

Cameron, S.J., Horsburgh, M.E., and Armstrong-Stassen, M. (1994). Job satisfaction, propensity to leave and burnout in RNs and RNAs: A multivariate perspective. *Canadian Journal of Nursing Administration*, *7* (3), 43–64.

Chordiya, R., Sabharwal, M., and Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration, 95*(1), 178-195.

Chughtai, A. A., and Zafar, S. (2006). Antecedents and consequences of organisational commitment among Pakistani university teachers. *International Journal of Manpower, 19*(3), 184-194.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Cotton, J. and Tuttle, J. (1986). Employee turnover: A meta-analysis and review with implication for research. *Academy of Management Review, 11*(1), 55-70.

Dalessio, A., Silverman, W. H., and Schuck, J. R. (1986). Paths to turnover: A re-analysis and review of existing data on the Mobley, Horner, and Hollingsworth turnover model. *Human Relations, 39*(3), 245-263.

Davidson, M. C., Timo, N., and Wang, Y. (2010). How much does labour turnover cost?: A case study of Australian four-and five-star hotels. *International Journal of Contemporary Hospitality Management*, *22*(4), 451-466.

Devyanti, N. L. P. L., and Satrya, I. G. B. H. (2020). Effect of job satisfaction on turnover intention with organizational commitment as a mediating variable. *American Journal of Humanities and Social Sciences Research, 4*(3), 293-298

Dharmayanti, K. A., and Sriathi, A. A. A. (2020). The role of organizational commitment mediates the effect of job satisfaction on employee turnover intention in Bali Relaxing Resort and Spa. *American Journal of Humanities and Social Sciences Research, 4*(1), 188-194.

El-Dief, M., and El-Dief, G. (2019). Factors affecting undergraduate's commitment to career choice in the hospitality sector: Evidence from Saud Arabia. *Journal of Human Resources in Hospitality & Tourism, 18*(1), 93-121.

Ekhsan, M. (2019). The influence job satisfaction and organizational commitment on employee turnover intention. *Journal of Business, Management, and Accounting, 1*(1), 48-55.

Emiroğlu, B.D., Akova, O., and Tanrıverdi, H. (2015). The relationship between turnover intention and demographic factors in hotel businesses: A study at five-star hotels in Istanbul. *Procedia - Social and Behavioral Sciences*, 207, 385-397.

Etikan, I., Musa, S. A., and Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4.

Field, A. (2018). *Discovering statistics using IBM SPSS Statistics.* (5th edition). London: Sage Publication Ltd

Fishbein, M., and Ajzen, I. (1975), *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley

George, D., and Mallery, P. (2019). *IBM SPSS Statistics 25 step by step: A simple guide and reference*. (15th edition). New York: Routledge.

Griffeth, R. W., Hom, P. W., and Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, *26*(3), 463-488.

Gunlu, E., Aksarayli, M., and Şahin Perçin, N. (2010). Job satisfaction and organizational commitment of hotel managers in Turkey. *International Journal of Contemporary Hospitality Management*, *22*(5), 693-717.

Hair, J. F. Jr., Black, W.E., Babin, B. J., and Anderson, R.A. (2019). *Multivariate data analysis*. (8th edition). Hampshire: Cengage Learning EMEA.

Hayes, A. (2019). Process tool v.3.4.1. http://afhayes.com/introduction-to-mediation-moderation-and-conditional-process-analysis.html (Accessed 20 February 2020)

Hellman, C. M. (1997). Job satisfaction and intent to leave. *The Journal of Social Psychology*, *137*(6), 677-689.

Hokororo, S. J., and Michael, F. (2019). Predicting academic staff intention to stay in Tanzanian universities using job embeddedness model: Smart PLS approach. *Pan African Journal of Business Management, 3*(2), 1-18.

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, *63*(6), 597-606.

Jaros, S. J. (1997). An assessment of Meyer and Allen's (1991) three-component model of organizational commitment and turnover intentions. *Journal of Vocational Behavior*, *51*(3), 319-337.

Jonathan, H., Darroux, C., and Massele, J. (2013). Perceived job satisfaction and its impact on organizational commitment: An empirical study of public secondary school teachers in Dodoma, Tanzania. *IOSR Journal of Business and Management*, *13*(3), 41-52.

Jonathan, H., Darroux, C., and Thibeli, M. (2013). Exploring the effect of job satisfaction and demographic factors on affective, normative and continuance commitment: An empirical evidence of public secondary school teachers in Tanzania. *Journal of Education and Practice*, *4*(23), 85-96.

Jonathan, H., Thibeli, M., and Darroux, C. (2013). Impact investigation of organizational commitment on intention to leave of public secondary school teachers in Tanzania. *Developing Country Studies*, *3*(11), 78-91.

Kanwar, Y. P. S., Singh, A. K., and Kodwani, A. D. (2012). A study of job satisfaction, organizational commitment and turnover intent among the IT and ITES sector employees. *Vision*, *16*(1), 27-35.

Khan, I., Nawaz, A., and Khan M.S. (2013). Determining the organizational commitment of academicians in public sector universities of developing countries like Pakistan. *International Journal of Research in Accounting, Finance and Management Sciences, 3*(1), 280–289.

Lambert, E., and Hogan, N. (2009). The importance of job satisfaction and organizational commitment in shaping turnover intent: A test of a causal model. *Criminal Justice Review*, *34*(1), 96-118.

Lambert, E.G. (2006). I want to leave: A test of a model of turnover intent among correctional staff. *Applied Psychology in Criminal Justice*, *2* (1), 58-83.

Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, *4*(4), 309-336.

Luz, C. M. D. R., de Paula, S. L., and de Oliveira, L. M. B. (2018). Organizational commitment, job satisfaction and their possible influences on intent to turnover. *Revista de Gestão*, *25*(1), 84-101.

Maertz, C.P., and Campion, M.A. (1998). 25 years of voluntary turnover research: A review and critique. New York: *International Review of Industrial and Organizational Psychology*, *13*, 49–81.

Markovits, Y., Davis, A. J., Fay, D., and Dick, R. V. (2010). The link between job satisfaction and organizational commitment: Differences between public and private sector employees. *International Public Management Journal*, *13*(2), 177-196

Masum, A. K. M., Azad, M. A. K., Hoque, K. E., Beh, L. S., Wanke, P., and Arslan, Ö. (2016). Job satisfaction and intention to quit: An empirical analysis of nurses in Turkey. *PeerJ*, *4*, e1896. https://doi.org/10.7717/peerj.1896

Meyer, J. P., and Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, *1*(1), 61-89.

Meyer, J., Stanley, D., Herscovitch, L., Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: a meta-analysis of antecedents, correlates, and consequences. *J. Vocational Behav. 61*, 20–52

Mkumbo, K. (2014). Prevalence of and factors associated with work stress in academia in Tanzania. *International Journal of Higher Education*, *3*(1), 1-11.

Mobley, W., Griffeth, R., Hand, H., and Meglino, B. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*, 493-522.

Mohamed, F., Taylor, G., and Hassan, A. (2006). Affective commitment and intent to quit: The impact of work and non-work related issues. *Journal of Managerial Issues, 18*(4), 512-529. Retrieved April 20, 2020, from www.jstor.org/stable/40604556

Ngatuni, P., and Matolo, A. (2018). The effects of job satisfaction on employees' turnover intention in commercial banks in Tanzania. *Pan African Journal of Business Management, 2*(1), 55-81

Nyahongo, J. (2015). Improving socio-Economic environment to promote academic staff retention in Tanzanian universities: Case study of the University of Dodoma, in *managing change at universities-A selection of case studies from Africa and Southern Asia*, Volume II. (Edited by Peter Meyer and Marc Wilde).

Ozturk, A. B., Hancer, M., and Im, J. Y. (2014). Job characteristics, job satisfaction, and organizational commitment for hotel workers in Turkey. *Journal of Hospitality Marketing & Management*, *23*(3), 294-313.

Pallant, J. (2016). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS*. (6th edition). Berkshire: McGraw Hill Pearson.

Phillips, J.J., and Connell, A.O. (2003), Managing employee retention: A strategic accountability approach: Chelsea: Butterworth-Heinemann, Elsevier.

Pienaar, C., and Bester, C. L. (2008). The retention of academics in the early career phase: Empirical research. *SA Journal of Human Resource Management*, *6*(2), 32-41.

Porter, L. W., Steers, R.M., Mowday, R.T. and Boulian, P.V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59*, 603-609.

Price, J., and C. Mueller (1986). *Absenteeism and turnover among hospital employees*. Greenwich, CT: JAI Press.

Purani, K., and Sahadev, S. (2008). The moderating role of industrial experience in the job satisfaction, intention to leave relationship: An empirical study among salesmen in India. *Journal of Business & Industrial Marketing*, *23*(7), 475–485. https://doi.org/10.1108/08858620810901239

Robbins, S. P., and Judge, T. A. (2018). *Essentials of organizational behaviour*. (14th edition). Harlow: Pearson Education Limited

Rogerson, P. A. (2001). *Statistical methods for geography*. London: Sage.

Saridakis, G., Lai, Y., Muñoz Torres, R. I., and Gourlay, S. (2018). Exploring the relationship between job satisfaction and organizational commitment: An instrumental variable approach. *International Journal of Human Resource Management,* 5192, 1–31. https://doi.org/10.1080/09585192.2017.1423100

Steel, R. P., and Ovalle, N. K. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. *Journal of Applied Psychology*, *69*(4), 673.

Tabachnick, B.G., and Fidell, L.S. (2019). *Using multivariate statistics.* (7th edition). Boston: Pearson Education.

TCU (2020). Tanzania Commission for Universities, List of Registered Universities and University Colleges in Tanzania: Status by January 2020. [www.tcu.go.tz] site visited on February 2020.

Tettey, W. (2010). *Challenges of developing and retaining the next generation of academicians: deficit in academic staff capacity at African universities*. Partnership for Higher Education in Africa.

Tnay, E., Othman, A. E. A., Siong, H. C., and Lim, S. L. O. (2013). The influences of job satisfaction and organizational commitment on turnover intention. *Procedia-Social and Behavioral Sciences*, *97*(201-208), 3-8.

Tracey, J. B., and Hinkin, T. R. (2008). Contextual factors and cost profiles associated with employee turnover. *Cornell Hospitality Quarterly*, *49*(1), 12-27.

Tubay, J. B. (2019). The role of job satisfaction and organizational commitment on turnover intentions of accounting professionals in big 3 auditing firms in the Philippines with moderating effect of leader-member exchange. *International Review of Management and Marketing*, *9*(2), 84-88.

URT (2010). *Higher education development programme 2010 - 2015: Enhanced relevance, access and quality in higher education*. Ministry of Education and Vocational Training, Dar Es Salaam, Tanzania.

Vandenberg, R. J., and Lance, C. E. (1992). Examining the causal order of job satisfaction and organizational commitment. *Journal of Management*, *18*(1), 153-167

Villanueva, D., and Djurkovic, N. (2009). Occupational stress and intention to leave among employees in small and medium enterprises. *International Journal of Stress Management*, *16*(2), 124.

Wayne, S. J., Shore, L. M., and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, *40*(1), 82-111.

Weisberg, J., and Kirschenbaum, A. (1991). Employee turnover intentions: implications from a national sample. *International Journal of Human Resource Management*, *2*(3), 359-375.

Weiss, D. J., Davis, R. V., England, G. W., and Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. *Minnesota studies in vocational rehabilitation*, No XXII. Minneapolis: Industrial Relations Centre, University of Minnesota, pp125

The Effect of Marketing Capabilities on Small and Medium Enterprises' Performance: A Dynamic Capabilities Approach to Rwanda Manufacturing Sector

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Abstract: *The issue of what contributes to performance heterogeneity among firms has, since, been within the business strategic management literature. Some scholars have focused on external factors while others, recently, focused on internal factors (resources) to explain inter-firm performance differences. Falling into the second wave focusing on internal factors, this study, therefore, investigated the contribution of marketing capability on small and medium enterprises' performance in the Rwanda manufacturing sector. Grounded on the dynamic capabilities theory, the study specifically thought to determine the effect of innovation-marketing capability and brand-marketing capability on firm performance. By the mean of a survey questionnaire, data were collected from 210 selected manufacturing companies and the qualified respondents were marketing managers. Using a structural equation modelling approach, it was empirically proved that marketing capability has a positive significant impact on firm performance, especially, it was found that a firm's innovation-marketing capability and brand-marketing capability both positively and significantly influence firm performance. It is suggested that manufacturing companies lay more emphasis on improving their branding capability since it is the most critical in boosting firm performance. The findings implied that firms with strong marketing capability innovate and implement new processes to meet customer needs.*

Keywords: Marketing Capabilities, Performance, Rwanda, Manufacturing Sector

Introduction

Research Background

Despite the world's widely recognized potential role of SMEs in contributing to the socio-economic development of nations, the sector continues to face binding constraints that limit their potential growth. Some of these constraints are related to the business environment in general such as access to finance, access to market, rigid regulatory, etc. However, little is known about internal factors that limit the potential growth of SMEs, especially organizational capabilities.

A firm's capabilities develop when individuals and groups within the organization apply their knowledge and skills to acquire, combine, and transform available resources in ways that

contribute to achieving the firm's strategic goals (Mahoney & Pandian 1992; Teece *et al.*, 1997). These capabilities are dynamic when they enable the firm to implement new strategies to reflect changing market conditions by modifying the resources available to the firm and/or combining and transforming available resources in new and different ways (Teece *et al.*, 1997). Among these capabilities, marketing-related ones are considered relevant to sustainable competitive advantage (Mu, 2015).

Marketing capabilities represent a firm's ability to understand and forecast customer needs better than its competitors and to effectively link its offering to the customer (Dutta *et al.*, 1999; Mu, 2015). Therefore, based on the dynamic capabilities' perspective, marketing capabilities are expected to influence firms' performance positively because they are embedded in the organization. To support this thinking, prior empirical studies reported a positive relationship between marketing capabilities and firm performance/competitiveness (Acikdilli, 2013; Guoa *et al.*, 2018; Morgan *et al.*, 2009; Saleh, 2015); product capability and export performance (Leonidou *et al.*, 2002) product innovation and export performance (Lim *et al.*, 2006; Murray *et al.*, 2011; Zhang *et al.*, 2003) highlighting that firm with strong marketing capability can effectively develop strong competitiveness.

Rwanda suffered devastation in the 1990s which culminated in the genocide against Tutsi in 1994 and the destruction of economic tissues. In a bid to address the situation, five years after the war and genocide against Tutsi, the government of Rwanda documented a vision to strive for self-reliance and rebuild itself. Rwanda's manufacturing sector was among the key productive sectors of the economy identified under vision 2020 which can spur growth because of its immense potential for value creation, employment generation, and poverty alleviation. However, the industrial sector in Rwanda is still small (0.68%: 868/126.398 firms) but quite competitive and contributed to average 16% of GDP for a decade ago (2008-2017); one-third the size of the agricultural sector (48% for the same period) (World Bank 2018) and some way short of Rwandan Vision 2020's target of 26% with 11% of contribution to total employment (MINICOM, 2017). This requires, however, that the sector remains competitive to deliver. A curious observation yet, suggests that overall aggregate demand for the sector in Rwanda remains to the researcher's best knowledge very low, the narrowed markets are saturated with internal stiff competition (processing similar goods) and competition from imported goods and mostly the limited information about the market. As such these constraints are internal to the company and call for a new approach to address the marketing issues within the Rwandan manufacturing sector.

Although the dynamic capability theory provides an important framework to explain firm performance variations based on capabilities including marketing capability, its framework, however, was designed to fit larger firms. it is unclear if this theory developed for larger firms should fit also small and medium enterprises. This was previously supported by Zahra *et al.*, 2006 and Trot *et al.*, 2009 findings that most research and theory building has concentrated on large companies while ignoring SMEs. A curious observation from the reviewed literature indicates that there is a scantiness of related studies on SMEs to test this theory in developing countries including Rwanda. The literature on the use of marketing capability combining innovation and branding as its determinants that enhance competitiveness in SMEs is –to the

researcher's best knowledge- really scanty in less developed countries including Rwanda as both innovation and branding concepts are customarily used in large firms.

This study undertook to bridge this knowledge gap by validating the Dynamic Capabilities Theory framework that was developed in advanced economies for large companies to fill the gap. Therefore, the purpose of this research paper is to investigate the potential contribution of marketing capabilities proxy as Innovation-Marketing capability and Brand-Marketing capability on the performance of small and medium Enterprises (SMEs) operating in the manufacturing sector. This study provides the necessary dimensions of marketing capability required –other factors remaining constant- for improving the sector's competitiveness to enable it to deliver to the country's expectations. Therefore, this knowledge is important for policymakers, business practitioners as well as researchers/ academicians.

Theoretical Foundation and Hypothesis Development

The issue of what contributes to performance heterogeneity among firms has, since, been within the business strategic management literature. Some scholars have focused on external factors while others, recently, focused on internal factors (resources) to explain inter-firm performance differences (Barreto, 2010; Helfat & Peteraf, 2009). Falling into the second wave focusing on internal factors, the starting point of the present study is the dynamic capabilities theory (DCT) that seeks to identify the characteristics of firms with superior performance and that adopts the resources and capabilities controlled by a firm as its primary unit of analysis (Rouse & Daellenbach, 2002). As extension of the resource-based view, pioneering by the works of Teece & Pisano, 1994; Teece *et al.*, 1997; and continuing with the studies of Helfat *et al.*, 2007; Teece, 2014; Teece, 2017; Wang & Ahmed, 2007 and Wang *et al.*, 2015 and many others; the dynamic capability theory framework has emerged as the new hallmark in the domain of strategic management literature due to its increased importance in the explanation of strategic advantages (Cordes-Berszinn, 2013). According to this theory, firm performance is primarily determined by the firm's capabilities of acquiring and deploying resources to match their market environment (Al-Aali, 2011; Eisenhardt & Martin, 2000; Makadok, 2001; and Teece *et al.*, 1997). Within this context, the contribution of marketing capability in driving superior firm performance has been of significant interest to marketing scholars (Mu, 2015; Vorhies, 2005).

Song *et al.*, (2005) and Mu (2015) define marketing capability as the ability of a company to use its tangible and intangible resources to understand complex consumer specific needs, achieve product differentiation relative to competition, and achieve superior performance advantage. Day (1994) for its part, defines marketing capability as an integrative process designed to apply the collective knowledge, skills, and resources of the firm to the market-related needs of the business, enabling the business to add value to its goods and services and meet competitive demands. He further points out that it is not possible to list all company capabilities because every firm develops its configuration rooted in the realities of its competitive market, past commitments, and anticipated requirements. However, some capabilities can be recognized in all businesses, corresponding to the core process for creating economic value. In this sense, Day (1994) identified three types of marketing capabilities: outside-in, inside-out and spanning capabilities.

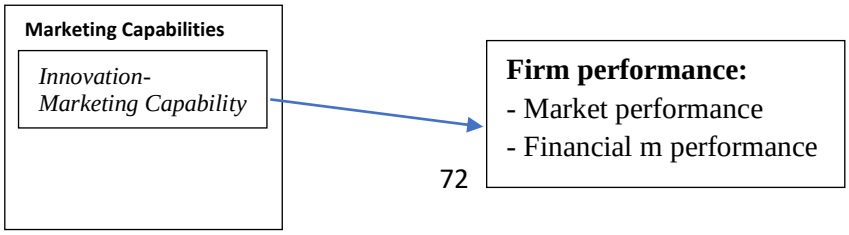
Conceptual literature has endorsed the relevance of marketing capabilities to understanding firm strategy and performance (Varadarajan & Jayachandran, 1999). They proposed a way forward in terms of understanding and explaining firm behaviour in the realm of deploying marketing resources for competitive advantage. In empirically appraising the contribution of marketing capabilities to firm performance, there appear to be two approaches. One approach, especially the early studies, conceptualise marketing capabilities in terms of mid-level marketing process supporting strategy and includes the marketing mix (4Ps) elements, market research, and market management (Vorhies, 1998; Vorhies & Morgan, 2005); advertising and distribution (Vorhies, 1998; Vorhies & Harker, 2000; Vorhies & Morgan, 2005). A limitation of this stream, however as recognized by one of the proponents Vorhies & Morgan, 2005 is that it excludes any assessment of high-level integrative capabilities, such as brand management, innovation, and customer relationship management, which is the second approach.

In the same year, Hooley *et al.*, (2005) building on preliminary work in Hooley *et al.*, (1999) provided an assessment of several high-level marketing capabilities, including brand reputation, customer relationship marketing, and innovation. Therefore, the current paper restrains itself to investigating just two higher-level marketing capability, namely innovation and Branding as summarised hereunder:

Innovation capability is seen as critical for competitive advantage and superior marketing performance (Han *et al.*, 1998; Hooley *et al.*, 2005); it is a particularly powerful determinant of marketing performance. A significant change in product design, packaging, placement, and promotion or pricing is defined as a marketing innovation (OECD, 2005). To increase the firm's sales, marketing innovation will be implemented through fulfilling the customer needs better, opening up new markets, or re-position a firm's product on the market. In the SME context, similar studies have shown the importance of innovation in performance (Weerawardena *et al.*, 2006).

Branding capability is a second higher-level marketing capability that is a potential determinant of marketing performance. Branding capability reflects the ability not only to create and maintain high levels of brand equity but also to deploy these resources in ways that are aligned with the market environment (Morgan *et al.*, 2009). The importance of branding is also emphasized in Mitchell *et al.*, (2001) and McQuiston (2004). Therefore, firms with strong brand management capability are likely to enjoy higher performance through the attraction of new customers.

Firm performance refers to the capability of a business to access the degree of its success within a particular period (Eniola & Ektebang, 2014). In this research study, firm performance is conceptualized as referred to as market performance and financial performance. Market performance includes market share, number, and quality of key customer relationships and physical facilities established to carry out marketing activities. Financial performance includes increased sales and increased profit.



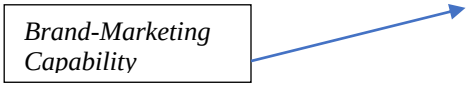


Figure.1. Conceptual Model of the Marketing Capabilities-Performance Nexus
Source: Researcher's compilation, 2019

This study developed a conceptual model that captures the relationship between marketing capabilities proxy as innovation-marketing capability and brand-marketing capability on firm performance. Therefore, based on the above discussion, it was hypothesised the following:

H01: Innovation-Marketing Capability positively relates to the performance of small and medium manufacturing companies.

H02: Brand-Marketing Capability positively relates to the performance of small and medium manufacturing companies.

Empirical Review

In recent times, there is an extensive amount of literary research devoted to the influence of marketing capabilities and firm performance within the context of resource-based view and dynamic capability theory. Nevertheless, the bulk of such empirical research on capabilities-performance relationship using dynamic capability theory tends to be concentrated on large companies in developed countries (Li & Liu, 2014; Wang & Ahmed, 2007); very limited studies have devoted such research on SMEs in Africa, and even few in Rwanda. Research on this issue assumes performance is attributable to variation in firm-level marketing capability. This section reviewed and summarised some empirical studies linking marketing capability to firm performance.

Table 1. Summary of Previous Empirical Researches

Author(s) and Year	Research context	Respondents	Methods/ Approaches	Analysis techniques	Findings
Morgan *et al.*, 2009	USA	114 industries	Descriptive survey	Regression analysis	Marketing capabilities have direct and complementary effects on both revenue and margin growth rates
Acikdilli (2013)	Turkey	415 manufacturing firms	Survey	Confirmatory factor analysis and structural equation modelling	Marketing capabilities (i.e., product development, channel management, selling and delivery management) positively and significantly affect export market orientation.
O'Cass and Siahtiri (2015),	Pakistan	341 manufacturing and service firms.	Descriptive survey	SEM analysis	Marketing capabilities and marketing orientation have significant effect in achieving firm performance
Harram and Fozia (2015)	Pakistan	100 manufacturing firms	Descriptive survey	Correlation, Regression and mediating regression analysis	Positive effect of marketing capabilities on performance
Salisu *et al.*, (2017)	Nigeria-Kano	361 firms	Quantitative method	PLS-SEM approach	Positive relationship between marketing capability and firm

state	performance.

Source: Researcher's compilation based on the reviewed literature, 2019

Method

Research Philosophy and Design

Falling into the positivist paradigm which accords with the quantitative method and deductive approach, the study design selected for this research is the cross-sectional explanatory survey design due to time strategy of data collection, analytical method of data and the survey strategy nature of the study.

Research Population, Sample Size, and Sampling Method

The total population of this study comprises of 868 small and medium manufacturing companies countrywide. While a population is the total collection of elements about which the researcher wishes to make some inferences (Cooper & Schindler, 2014) a sample is a selection of elements or individuals from a larger body or population (Hair *et al.*, 2017b) or the number of observations that are included in the research study (Cooper & Schindler, 2011; Zikmund *et al.*, 2015). A good sample should reflect the similarities and differences found in the population so that it is possible to make inferences from the (small) sample about the (large) population (Hair *et al.*, 2017b). However, to operationalise a multiple regression analysis or structural equation modelling the rule of thumb of selecting appropriate sample size is to identify the number of parameters (i.e. measurement items) that should be multiplied with 5 or 10 (Kline, 2015) also known as a subject-to-variables ratio of 5:1 or 10:1. The minimum sample size is "to have at least five times as…the number of variables to be analysed" Hair *et al.*, (2006). So, since the questionnaire of this study has 28 questions, the estimated sample size for this study would be 28*5= 140 or 28*10=280. The actual respondents consisted of 244 marketing managers/directors from small and medium manufacturing companies that fulfilled the selection criteria. However, from the 244 distributed questionnaires, 210 were returned and fully completed; making the final response rate of 86%; enough for generalisation.

The stratified sampling method was chosen in selecting respondents. Within this context, the researcher has applied proportionate stratification that is based on the stratum's share of the total population to come up with the minimum sample in each stratum (Amin, 2005) herein referred to as business categories (Food, beverage and tobacco; Textile, clothing and leather; Wood, Paper and Printing; Chemicals, Rubber and Plastics; Non-metallic minerals, Furniture and Others). A survey questionnaire was used for data collection.

Data Collection, Research Variables and their Measurements

Data for both the independent and dependent variables were collected through a survey questionnaire that was addressed to companies' marketing managers or directors. In line with the previously postulated hypotheses, the questionnaire encompassed various elements of marketing capabilities as well as the firm's performance that the managers were asked to measure. The survey questionnaire was borrowed from previous studies and adapted to fit the current setting.

The survey instrument was developed in English and translated into the local language followed by a back-translation (English-Kinyarwanda-English). The questionnaires were administered using the drop-off and collection method. Before the final survey, the questionnaire was pre-tested and the pilot study conducted to a sample of 17 small and medium manufacturing companies to assess the psychometric properties of the measures so that each item in a scale associated with the remaining items (Babbie & Mouton, 2002). After performing the pilot study, the resulting Cronbach's alpha was 0.906 (see Appendices Table 4) high then the cut-off of 0.7 (Hair *et al.*, 2010).

All respondents, of which there were 244 in this study, were asked to answer questions using a five-point Likert scale. They were asked to rate the level of marketing capabilities and firm performance over three years when compared with their most important competitors. After pre-testing, all the three constructs were measured by twenty-four-items with five-point rating scales ranging from (1) Very low (5) Very high to capture the perceived marketing and performance levels compared to competitors over the past three years. Out of 17 items, 12 were adapted from Vorhies & Morgan (2005) (marketing capabilities) and six of the seven items related to performance were borrowed from Kasema (2019a); while the remaining ones were self-developed. The measures were constructed so that the individual items refer to various necessary and related areas of the unobserved construct (Cohen *et al.,* 1990).

Data Analysis Technique

The collected data were analysed using Structural equation modelling (SEM) approach with two statistical software tools, namely, the Statistical Package for Social Sciences (SPSS) version 25.0 and the Analysis of Moment Structures (AMOS). Referred to as structural equation modelling, SEM is a second-generation technique used to overcome the weaknesses of first-generation methods that simultaneously estimate the multiple regression equation in a single framework, i.e. it tests the relationships between observed and latent variables (Pervan *et al.,* 2018). The technique enables researchers to incorporate unobservable variables measured indirectly by indicator variables (Hair *et al.,* 2017b).

Results and Discussion

Preliminary Results

There exist some assumptions before conducting SEM including but not limited to the sample size, data normality, data outliers and multi-collinearity.

The *size of the sample* influences the ability of the model to be estimated correctly, as well as the specification error to be identified. As the Maximum Likelihood Estimation (MLE) technique is one of the most commonly used to perform SEM fittingly, Ding *et al.,* (1995) endorse a minimum sample size ranging between 100 and 150 respondents. Besides, a subject to the variable ratio of 5:1 or 10:1 is often used as a standard sample size that would make the obtained fit significant. Therefore, the sample size of 244 for this model fits well with the recommendation of Kline, 2015 and Ding *et al.,* 1995. Another important issue that has to be checked in conducting SEM is the presence of outliers.

A common approach to the detection of an outlier is to calculate the squared Mahalanobis distance, which measures the distance in standard deviation units between a set of scores for one case/respondents and the sample means for all the variables, i.e. centroid (Byrne, 2016). It was found that outlies were not part of the entire population identified (Hair *et al.*, 2006). An additional important issue that must be checked before running SEM is that the data show a *multivariate normal distribution*. The results obtained for the data normality showed that there is no deviation from normality.

The presence of *multicollinearity* causes a problem in SEM because the results of some tests may be biased. The usual practice is to compute bivariate correlation or to run the multiple regression and inspect values of tolerance and variance inflation factor (VIF). VIF values for all the variables in the model as reported in Appendices Table 5 are far below the critical level of 10 but greater than 1; confirming that there is no evidence of multicollinearity in the analysed data (Everrit, 2004).

Finally, in assessing the structural equation model, the reliability and validity of the measurement model must be examined. Item (construct) reliability can be assessed by factor loadings (Cronbach's Alpha) values. According to Azwa *et al.,* 2016, the individual item reliabilities use ladings of the item into their respective constructs, and on their standardized from, loadings should be greater than 0.7 (Hair *et al.,* 2010). The result showed that all the items had satisfying loadings that were close to or higher than the desirable level. Besides, the construct's reliability can be assessed by Cronbach's Alpha that analysed the consistency of the overall respondents in answering the items of a particular contract. The value of this indicator should generally be larger than 0.6 (Azwa *et al.,* 2016; Teo *et al.,* 2013). In this study, these values were 0.825, 0.744 and 0.972 respectively for innovation capability, brand capability and performance as reported in Appendices Table 6 confirm, therefore, the reliability of the measurement model.

As per the validity of the measurement model, convergent and discriminant validity were used. Convergent validity was evaluated according to Ylinen & Gullkvist (2014) by examining the composite reliability (CR) and average variance extracted (AVE) for which results are reported in Appendices Table 6. While CR indicates the consistency of the constructs, AVE measures the amount of variance attributed to the construct relative to the amount due to measurement error (Azwa *et al.,* 2016). Both the CR values for this study (0.772; 0.766 and 0.792) and the AVE (0.612; 0.609 and 0.669) were higher than the minimum threshold of 0.7 (CR) and 0.6 (AVE) (Hox & Bechger, 2012; Teo *et al.,* 2013; Ylinen & Gullkvist, 2014). So, the convergent validity for the measurement model was positively assessed and established. On the other side, the discriminant validity for each construct was obtained by comparing the squared correlations between latent variables and the average variance extracted (AVE) scores for each of the pairwise constructs. For adequate discriminant validity, AVE should be larger than the squared correlation (Hair *et al.,* 2014). Since this condition was fulfilled for all three of the observed relationships (as reported in Appendices Table 6), it was concluded that the discriminant validity for the constructs had also been obtained. The assessment of the structural model is presented in the following sections.

When profiling the participants and their businesses, it was found that the sector is a male-dominated one (61%) with most of the actors having a secondary level of education (47%) falling into middle adulthood aged between 40 and 59. As per business age, most surveyed companies fall between 4-9 years old representing almost half of total surveyed businesses mostly operating into food, beverage and tobacco sub-sector with 47%.

Exploratory Factor Analysis (EFA)

In this research study, a conceptual model was developed with constructs and indicators variables from different theories, empirical literature and expertise view without data. Therefore, EFA was used as a diagnostic tool to assess whether the collected data are in line with the theoretically expected structure of construct used and determine if the measures used measured what they were intended to measure. So, the EFA was conducted using Principal Component Analysis (PCA) and orthogonal method with VARIMAX rotation to evaluate the underlying dimensions of the three latent variables and later to identify the number of components and factors emerging in the survey questionnaire. Indeed, principal components with Eigenvalues greater than one are usually retained. According to Leech *et al.*, (2005) the assumptions for PCA include:

Sample size: a minimum sample size of 100 subjects is acceptable, the final sample was 210 in this study. Normality: PCA is robust to the assumption of normality. *The normality* of the data was assumed by using the Kolmogorov-Smirnov test (significance value was greater than 0.05). *Sampling adequacy:* Bartlett's Test of Sphericity (BTS) and the Kaiser-Meyer-Olkin (KMO) measure the sampling adequacy and can be used to determine the factorability of the matrix as a whole. If Bartlett's Test of Sphericity is large and significant and if the KMO is greater than 0.6 then factorability is assumed. The KMO measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. Higher values (between 0.5 and 1.0) indicate factor analysis is appropriate (Leech *et al.*, 2005). The results from Table 7 in Appendices the KMO (0.881) and BTS 2.66 and the level of significance at p=0.00) indicated that data were appropriate for PCA. The result of the KMO measure of sampling adequacy was 0.881 which indicated that three are sufficient items for each factor. Therefore, the two tests supported the appropriateness of the PCA technique.

Application of Structural Equation Modelling (SEM) Approach on Firm Performance Research Model

The structural equation modelling (SEM) is widely applied in different areas of Economics, Business, Marketing, ICT and Management. However, regardless of the area of the application of SEM, practitioners and theorists agree upon five steps involved in testing SEM: model specification, identification, estimation, evaluation and (if needed) modification (Teo *et al.*, 2013).

Model Specification

In this step of specifying the model, the relationship between the observed and latent variables are specified by researchers and are represented by parameters or paths. Three types of parameters are being specified: directional effects, variances, and covariance. The directional

effects in the structural model presented in Figure 2 are eighteen-factor loadings and two path coefficients. Variances are estimated for indicator error related to the 24 manifest variables, error related to the unobserved endogenous variable (performance) and two unobserved exogenous variables (branding and innovation). There is one covariance) non-directional relation between independent latent variables) in the analyzed model. The results of the estimated model are graphically presented in Appendices Figure 2. To facilitate the interpretation of the parameters, the parameter estimates are presented in their standardized form.

Model Identification

At this stage, the concern is whether a unique value for each free parameter can be obtained from the observed data. Shumacker & Lomax (2004) indicated that three identification types are possible. Indeed, structural models can be over identified, under-identified or just-identified, depending on whether the number of the parameters to be estimated is lower, higher or equal to the number of data points (variances and covariances of the observed variables). Since only the over-identified model is of scientific use, it is important in SEM to specify the model in a manner that encounters the criterion of over-identification (Pervan *et al.*, 2018). As illustrated in figure 2 there are 50 parameters in the model. On the other side, the application of the formula $p(p+1)/2$, where p stands for the number of manifest variables, revealed the total of (24*25)/2 = 300 data points. Therefore, the analysed model is over-identified with 240◦ of freedom.

Model Estimation

Using SPPSS and AMOS version 25.0 the model was estimated through the Maximum Likelihood procedure. Indeed, the MLE technique is suitable for data that present a multivariate normal distribution, which was confirmed to be the case for data in this sample. In assessing the parameter estimates Byrne (2015) recommended to pay more attention to the following three features: feasibility of parameter estimates, appropriateness of standard errors, and statistical significance. As per parameter estimates, the findings revealed that all parameter estimates showed a correction and size, and are consistent with the underlying theory. Standard errors are also of great importance in model estimation. The standardized values of the estimates as reported in Table 2 are similar to the standardised *B* weights and standardized betas in the regression analysis. The table reported also the critical ration (C.R) which stands for z-statistics in testing that the estimated standardized values of estimates, as well as the critical values for all parameters included in the analyzed model.

Certainly, the alternative hypothesis was that "there is a positive effect…" and parameter estimates were used to produce the estimated population covariance matrix for the structural model. The covariance matrix among the constructs was applied to test the model. When the critical ratio (C.R or t-value) is higher than 1.96 for an estimate (regression weight), then the parameter coefficient value is statistically significant at the 0.05 levels (Hair *et al.*, 2006). The critical ratio or t-value was obtained by dividing the regression weight estimate by the estimate of its standard error (S.E). Hox & Bechger (2014) contended that any relationship which will result in a critical ratio greater than 1.96 is considered statistically significant. Using the path estimates and C.R values, two causal paths were examined in this research study. For all causal paths estimates, t-values were above the 1.96 critical values (11.8 and 7.806 respectively) at the

significant level p ≤.05. It was also found that branding capability was the most critical (*β= 0.765)* in boosting firm performance.

Table 2. Regression Estimates of the Latent Constructs

Construct	Hypo theses	Relationship (Positive)	Standardized Regression weights (*β*)	C.R	Support
Innovation-Marketing Capabilities	H01	*IMC →FP*	0.749	11.88	Supported
Brand-Marketing capabilities	H02	*BMC → FP*	*0.765*	*7.80*	Supported

Source: Researcher's compilation based on AMOS output, 2019

Model Evaluation

The main task of model fit is to provide information about the degree to which the model fits the data. One of the measures to look at is the overall chi-square ($\chi 2$), which indicates whether the observed and implied variance-covariance matrices differ (Teo *et al.,* 2013) or not. A statistically no-significant value of this measure is an indicator of a good model. However, as worried by Byrne (2016), this index has proven to be unrealistic in most SEM empirical research, therefore, it must be considered in combination with the indices of model fit.

Table 3: Structural Model Assessment of Goodness of Fit Indices

	Absolute Fit Indices (AFI)					**Incremental Fit Indices (IFI)**		**Parsimony Fit Indices (PFI)**
	$\chi 2$	df	$\chi 2$ /df	GFI	RMSEA	TLI	CFI	AGFI
Criteria	≥ 0.05	21	>1<3	≥ 0.90	≤ 0.06	≥ 0.90	≥ 0.90	≥ 0.90
Source	Byrne 2016		Gefen *et al.,* 2000	Rehman *et al.,* 2015	Hu and Bentler 1999	Lei & Wu, 2007	Lei and Wu, 2007	Hair *et al.,* 1998
This Research	0.000		2.356	0.966	0.053	0.968	0.954	0.937

Note: $\chi 2$ = Chi-Square ; df =Degree of Freedom; GFI= Goodness of Fit Index; RMSEA= Root Mean Square Error of Approximation; CFI=Comparative Fit Index, AGFI= Adjusted Goodness of Fit Index; TLI = Tucker Lewis Index; F= Fail; P=Pass

Source: Researcher's compilation based on AMOS output, 2019

The fit indices reported in Table 3 indicated that the hypothesized structural model provided a good fit to the data. Although the likelihood ratio chi-square ($\chi 2 = 51.788$; df = 22; p = .000) was significant (p <.001) indicating an inappropriate fit; other fit measures showed that the model adequately fit the observed data. Moreover, the absolute fit measures i.e. GFI and RMSEA were 0.966 and 0.053 respectively indicating a good fit of model. The increment fit measures i.e. TLI and CFI were 0.968 and 0.954 respectively which were above the minimum requirement, showing adequate fit and the parsimony fit measure i.e. AGFI was 0.937 which also was above

the cut-off point of > 0.9. Further to these indices, the $\chi 2/$ df = 2.35 was within the threshold level i.e. 1.0 < x2 / df < 3.0) supporting these findings.

Discussion of Results

The hypothesised structural model was assessed using regression estimate and critical ratio. As result, the findings of this study strongly supported the hypothesised relationships proposed in the model; in particular, the results revealed that innovation capabilities and branding capabilities lead to firm performance over time. This suggested the existence of a positive and significant effect of marketing capabilities on firm performance. Therefore, the results of this research are consistent with the DCT and with those of prior research. These findings evidenced the provision of Dynamic capability theory, which emphasises on firm's ability to innovate and reconfigure the resources to cope with changes in the market (Wang & Ahmad, 2007), to deal with the rapid changes within the environment which makes some resources obsoletes as firms are regularly adjusting to meet up with changes in the market (Eisenhardt & Martin 2000). Theoretically, these results suggested that firm performance is improved through the distinctive way of allocation, coordination, and utilisation of resources and these attributes are derived from the dynamic capabilities.

The results implied further that marketing capability proxy as innovation-marketing and brand-marketing capabilities was a strong determinant of firm performance confirming thus the extant literature about marketing capabilities-performance nexus in favor of positive effect such as Atalay *et al.,* 2103; Abimbola & Vallaster 2007; Hulland *et al.*, 2007; Harram & Fozia 2015; Hooley *et al.*, 2005; Guoa *et al.*, 2018; O'Cass & Siahtiri 2015; Saleh, 2015; Weerawardena *et al*., 2006; Wong & Merrielees, 2008. It can reasonably be suggested that the level of innovation –marketing capability can assist manufacturers to cope not only with production cost but also and mostly with the quality of goods that can compete with imported ones.

Conclusion and Recommendations

Conclusion

The study main objective was to determine the impact of marketing capabilities and firm performance in the Rwanda manufacturing sector. More specifically, this study sought to determine the (i) impact of innovation-marketing capability and (ii) the impact of brand-marketing capability on firm performance in the Rwandan manufacturing sector. The study adopted a cross-sectional explanatory survey design due to the time strategy of data collection, analytical method of data and the survey strategy nature of the study. To collect data for this study, a survey questionnaire was developed and pre-tested. Data were analysed using Structural Equation Modelling (SEM) approach. Data were inspected for the presence of outliers, multivariate normality, and multi-collinearity, while reliability and validity were assessed by Cronbach's alpha, convergent and discriminant validity were also tested. After testing all the statistical assumptions, the standardised regression weights *(β)* and critical ratio (C.R) indicated that the hypothesis structural model provided a good fit to the data and that all hypotheses were accepted. More specifically, the results revealed that a firm's innovation-marketing capability and brand-marketing capability both influence firm performance. Moreover, brand-marketing

capability was proven to play, the most important role in determining a firm's performance among the surveyed firms. Therefore, the possibility of SMEs to grow depends highly upon their level of capabilities that allow striving in a competitive environment. Finally, the paper addressed the knowledge gap by investigating how specific marketing capability can effect a firm's performance. This study made a substantial contribution to the advancement of knowledge in marketing literature. It built on the DCT from strategic management, the paper developed a theoretical framework that associates a firm's innovation-marketing capability and brand-marketing capability with performance of small and medium manufacturing firms.

Limitations

Methodologically, the data collected for this study was cross-sectional; it would be difficult to contend that the accuracy of these findings will not vary over time because of the nature of a cross-sectional design. Besides, the study used self-reported (subjective) data to test the model. Although considerable efforts were made to ensure data quality during both data collection and data construct validation phases, the potential of survey biases cannot be excluded. Despite these limitations, however, steps were followed to mitigate them as evidenced by the results confirming that all the statements successfully passed the benchmark reliability and validity values.

Recommendations

For Policymakers and Managers

Furthermore, these findings offer suggestions that are beneficial to policymakers for addressing the sector constraints that affect the competitiveness of Rwanda's manufacturing sector against competitor countries. Managers should pay attention to marketing capabilities with a focus on brand-marketing capability. It is expected that by adapting these two components of marketing capability, SMEs operating in the Rwanda manufacturing sector could achieve superior performance.

For Future Research

Methodologically, logical expansion of this study would be to follow a combination of quantitative and qualitative methods for empirical testing to unpack how successful firms in the manufacturing sector execute marketing capabilities as a process. Secondly, the study was cross-sectional in nature, the use of longitudinal data and comparisons with this study would provide further insight that would assist in generalising knowledge on the marketing-performance nexus. Besides, in this study to collect data the researcher focused on the view of a single respondent within each firm, the marketing manager. Hence, a future empirical examination should emphasis multiple informants' views for inter-rater validity and to improve the internal validity of this kind of study. This study has recommended also that future research applying the study method in other destinations to be conducted for the generalisation of the model.

References

Acikdilli, G. (2013). The effect of marketing capabilities and export market orientation on export Performance. *Interdisciplinary Journal of Contemporary Research in Business*. *5*(6).

Aaker, D.A. and Jacobson, R. (1994). The financial information content of perceived quality. *Journal of Marketing Research, 31*(2), 191-201.

Abimbola, T and Vallaster, C. (2007). Brand, organizational identity and reputation in SMEs: an overview. *Quantitative Market Research, 10*(4), 341-348

Abimbola, T. (2001). Branding as a competitive strategy for demand management in SMEs. *Journal of Research in Marketing and Entrepreneurship*, *3*(2). 97-106

Adel Saleh, A. (2015). The role of marketing capabilities in firm's success. *International Journal of Management Science and Business Administration*, 2(1), 56-65

Amin, M. E. (2005). *Social science research: conception, methodology and analysis.* Makerere University Printery, Kampala. 459pp.

Azwa A. Nabila, S. and Kalsom A. W. (2016). The Relationship between Corporate Entrepreneurship and Firm Performance: Evidence from Malaysian Large Companies. *International Journal of Business and Society. 17*,59-80

Byrne, B. M. (2016). *Structural Equation Modelling With AMOS: Basic Concepts, Applications, and Programming* (3rd Ed.). New York: Routledge.

Berthon. P., Ewing, M. and Napoli, J. (2008). Brand management in small to medium-sized enterprises. *Journal of Small Business Management, 16*(1), 27-45

Cohen, L., Manion, L. and Morrison, K. (2000). *Research methods in Education*. 5th ed, London: RoutledgeFalmer

Cooper, D.R., and Schindler, P.S. (2011). *Business Research Methods* (11th edn). McGraw-Hill. New York. 761pp

Cooper D.R. and Schindler P. (2014). *Business research methods*, 12th edition. McGraw-Hill/Irwin. USA.

Day, G. (1994). The capabilities of market driven organizations. *Journal of Marketing*, *58*(4), 37 61.

Dutta, S., Narasimhan, O. and Rajiv, S. (1999). Success in high-technology markets: Is marketing capability critical? *Marketing Science, 18*(4), 547-568

Eisenhardt, K and Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10-11).

Eniola, A.A. &Ektebang, H. (2014). SME firms' performance in Nigeria: Competitive and its impact. *International journal of Research Studies in Management*, 3(2), 75-86.

Gefen, David, Detmar Straub, and Marie-Claude Boudreau (2000). Structural Equation Modeling and Regression: Guidelines for Research Practice. *Communications of the Association for Information Systems 4*, 1–70.

Guoa H, Xub H. Tangc C., Liu-Thompkinsc, Y Guod Z and Donge B (2018). Comparing the impact of different marketing capabilities: empirical evidence form B2B firms in China. *Journal of Business Research* (2018), https://doi.org/10.1016/j.jbusres.2018.04.010

Hair, J.F., Black, W.C, Babin, B.J., Anderson, R.E and Tatham, R.L. (2006). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.

Hair, J.F, Anderson, R.E., Tatham, R.L. and Black, W.C. (1998). *Multivariate data analysis*, (5th Edition). Upper Saddle River, N.J: Prentice Hall.

Hair, J. F., Hult, G. T. M., Ringle, C. M. and Sarstedt, M. (2017b). *A primer on partial least squares structural equation modelling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.

Han, J., Kim, N. and Srivastava, R. (1998). Market orientation and organizational performance: Is innovation the missing link? *Journal of Marketing, 62*(1), 30-45.

Harram A. and Fozia M. (2015). Customer orientated marketing capability and firm performance mediated by new product development capabilities and moderated by environmental turbulence. *International Journal of Economic and Management Science*. *4*(9).

Hooley, C., Greenley, G., Cadogan, J and Fahy, J. (2005). The performance impact of marketing Resources. *Journal of Business Research*, *58*(1), 18-27

Hox, J.J. and Bechger, T.M. (2012). An introduction to structural equation modelling. *Family Science Review*. *11*(2), 354-373.

Hu, L and Bentler, P. (1999). Cut-off criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modelling. 6*, 1-55.

Hulland, J., Business, R.I.S. (2017). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strateg. Manag. J. 20*, 195–204.

Hult, G., Hurley, R. and Knight, G. (2004). Innovativeness: It is antecedents and impacts on business performance. *Industrial Marketing Management*, *33*, 429-438

Kasema R. (2019a). The effect of innovation capabilities on firm performance of small and medium manufacturing companies in Rwanda. *Lambert Publishing House*.

Keller, K.L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1-22

Kline, R.B. (2011). *Principles and Practice of structural equation modeling,* 3rd ed. New York: Guilford Press, pp. 1–427.

Leonidou, L.C, Katsikeas, C.S. and Samiee, S. (2002). Marketing strategy determinants of export performance: A meta-analysis. *Journal of Business Research*, *55*(1), 51-67.

Lim, J.S., Sharkey, T. and Heinrichs, J. (2006). Strategy impact of new product development on export involvement. *European Journal of Marketing, 40*(1/2), 44-60.

Makadok, R. (2001). Toward a synthesis of the resource-based view and dynamic capability views of rent creation. *Strategic Management Journal. 22*(5), 387–401.

Mahoney, J. T and Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*. 13(5), 363-380.

McQuiston, D. (2004). Successful branding of a commodity product: The case of RAEX LASER steel. *Industrial Marketing Management, 33*, 345-354

MINICOM (Ministry of Trade and Industry) (2017). Made in Rwanda Policy. Kigali: Government of Rwanda.

Mitchell, P., King, J and Reast, J. (2001). Brand values related to industrial products. *Industrial Marketing Management*, *30*, 415-425

Morgan, N.A., Slotegraaf, R., J. and Vorhies, D.W. (2009). Linking marketing capabilities with profit growth. *Intern.J.of Research in Marketing*, *26*, 284-293

Murray, J.Y., Gao, G.Y. and Kotabe, M. (2011). Market orientation and performance of export ventures: the process through marketing capabilities and competitive advantage. *Journal of the Academy of Marketing Science*, *39*(2), 252– 269.

Netemeyer, R. G., Krishnan, B., Pulling, C., Wang, G., Yagci, M and Dean. D. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research, 65*(3), 1-16

O'Cass, A., Ngo, L. V. and Siahtiri (2015). Marketing resources-capability complementarity and firm performance in B2B firms. *Journal of Business and Industrial Marketing,* 30(2), 194-207.

OECD (2005). Oslo manual: Proposed Guidelines for Collecting and Interpreting Technological Innovation Data. Paris.

Pervan, M., Curak M., Kramaric, T. P. (2018). The Influence of Industry Characteristics and Dynamic Capabilities on firm's Profitability. *International Journal of Financial Studies*. *6*(4), 1-19

Rode, V. and Vallaster, C. (2005). Corporate branding for start-up: the crucial role of entrepreneurs. *Corporate Reputation Review*, *8*(2), 121-135

Teece, D.J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 19(7), 509-533.

Teece, D. (2007). Explicating Dynamic Capabilities: The Nature and Micro foundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*. *28*, 1319-50.

Teece, D. (2014). The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms. *The Academy of Management Perspectives*. *28*, 328-52

Teece, D. (2017). Business models and dynamic capabilities. *Long Range Planning*. 1-10.

Teece, D.J. and Pisano, G. (1994). The dynamic capabilities of the firms: An introduction. *Industrial and Corporate Change. 3*, 541-44.

Teo, T., Liang TT. And Yang C.C. (2013). Applying structural equation modelling (SEM) in educational research: An Introduction. Application of Structural Equation Modelling in Education Research and practice. Edited by Myint Swe Khine. Rotterdam: Sense Publishers, pp. 3–21

Salisu B., Julienti L.A, and Huda, S. A. (2017). The influence of marketing capability on firm performance: an empirical evidence from Nigeria. *European Journal of Business and Management, 9*(32).

Song, Z.H. (2015). Organizational learning, absorptive capacity, imitations and innovation: empirical analyses of 115 firm across China. *Chinese Management Studies,* 9(1), 97-113

Schumacker, R.E., and Lomax, R.G (2004). *A beginner's guide to structural equation modelling*. New jersey: Lawrence Erlbaum Associates.

Wang, C.L. and Ahmed P.K. (2007). Dynamic capabilities: A review and research agenda. *International Journal of Management Reviews*. *9*, 31-51

Wang, C. L., Chaminda S., and Rafiq M. (2015). Success, Traps, Dynamic Capabilities and Firm Performance. *British Journal of Management*. *26*(44).

Weerawardena, J., O'Cass, A. and Julian, C. (2006). Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. *Journal of Business Research, 59*(1), 37-45

Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*. *4*, 171-80.

Wong, H and Merrilees, B. (2005). A brand orientation typology for SME: A case research approach.*Journal of Product and Brand Management, 14*(3), 155-162

Wong, H and Merrilees, B. (2008). The performance benefits of being brand-oriented. *Journal of Product and Brand Management, 17*(6), 372-383

Varadarajan, P. and Jayachandran, S. (1999). Marketing strategy: An assessment of the state of the field and outlook. *Journal of the Academy of Marketing Sciences, 24*(2), 120-143

Vorhies, D. and Morgan, N. (2005). A roadmap for branding in industrial markets. *Journal of Brand Management, 11*, 388-402

Vorhies, D. (1998). An investigation of the factors leading to the deployment of marketing capabilities and organizational effectiveness. *Journal of Strategic Marketing*, *6*(1), 3-23

Zhang, C., Cavusgil, S.T. and Roath, A.S. 2003). Manufacturing governance of foreign distributor relationship: Do relational norms enhance competitiveness in the export market? *Journal of International Business Studies*, *34*(6), 550–566.

Zikmund, W., Quinlan, C., Babin, B., Carr, J. and Griffin, M. (2015). *Business research methods* (1rst edn.). Southwestern, Cengage Learning, Cincinnati Ohio. 704pp.

Zott, C. (2003). Dynamic Capabilities and the Emergence of Intraindustry Differential Firm Performance: Insights from a simulation study. *Strategic Management Journal*. *24*, 97-125.

APPENDICES

Table 4. Cronbach's Alpha of the Pilot Study.

Reliability Statistics

Cronbach's Alpha	N of Items
.906	24

Table 5. Multi-collinearity

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.162	.110		.597	.141		
	Mkcap	.791	.049	.821	36.014	.000	.660	1.054

a. Dependent Variable: Performance

Table 6. Reliability and Convergent Validity

Construct	**Cronbach's Alpha**	**Composite Reliability (CR)**	**Average Variance Extracted (AVE)**
InC	0.825	0.772	0.612
BrC	0.744	0.766	0.609
FmP	0.972	0.792	0.669

Table 7. KMO and BTS

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.881
Bartlett's Test of Sphericity	Approx. Chi-Square	2666.315
	df	276
	Sig.	.000

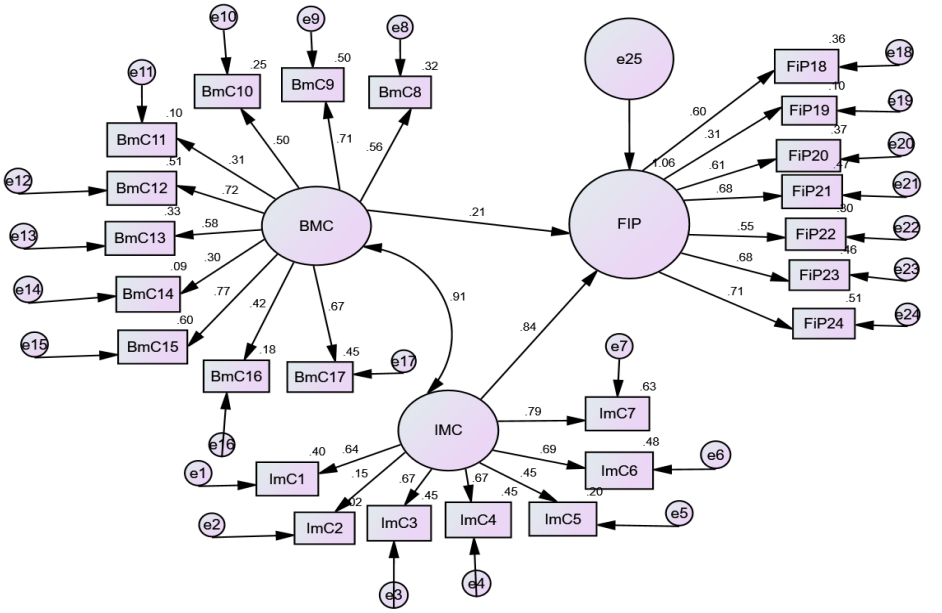


Figure 2. Structural Performance Model- standardized Estimate

The Dimensionality of Entrepreneurial Orientation in the Hospitality Industry

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Abstract

A lot of debates exist on the dimensionality of firms' entrepreneurial orientation in various industries. Understanding the dimensionality of entrepreneurial orientation and the relationships among its dimensions in the hospitality industry is important both theoretically and practically. This study bridges the theoretical gap by examining the dimensionality of entrepreneurial orientation in the industry. The study is based on a survey of hotels (n=346) in the Coastal and Northern tourist circuits of Tanzania. In the hospitality context, this study adds to the research that hotels' EO is multidimensional in nature exhibiting low-to-moderate correlations with each other and with an acceptable level of discriminant validity. This finding enriches other hospitality studies that consider entrepreneurial orientation as a unidimensional concept. The study also presents vital practical implications.

Keywords: Dimensionality, Entrepreneurial Orientation, Hospitality Industry, Tanzania

Introduction

An often-asked question in entrepreneurial orientation (EO) research is whether the EO concept fits well in a unidimensional or multidimensional conceptualization. Unidimensional constructs are expected to have a single underlying dimension while multidimensional constructs consist of two or more underlying dimensions (Jiang, 2006). A correct specification of EO is essential to avoid misleading empirical results and conclusions. For instance, contrary to EO theory, some empirical findings confirm that EO and its dimensions tend to exhibit unexpected negative or insignificant effects on business performance (Krauss *et al.*, 2005; Kropp *et al.*, 2006; Lechner and Gudmundsson, 2014; Oktavio *et al.*, 2019). Such unexpected results are possibly due to the pre-assumption that EO is merely a unidimensional construct (Eijdenberg, 2015; Vega-Vázquez *et al.*, 2016). In fact, the unidimensional view can mask the true influence on outcome variables (Njoroge, 2019).

Although EO is a highly researched concept, there exists no concrete consensus on the nature of its dimensionality for empirical measurements (Rauch *et al.*, 2009; Vega-Vázquez *et al.*, 2016; Hernández-Perlines, 2016; Jogaratnam, 2017). While most hospitality studies (Jogaratnam and Tse, 2006; Seilov, 2015; Vega-Vázquez *et al.*, 2016; Hernández-Perlines, 2016; Jogaratnam,

2017) are based on a priori assumption that EO is a unidimensional construct, it remains unclear whether EO in the hospitality context can also exhibit multidimensional conception. Meta-analysis studies (Rauch *et al.,* 2009; Saeed *et al.,* 2014) also confirm such bias. Thus, this study addresses the research question on what constitutes the dimensionality of EO in the hospitality industry. Tanzania has been selected as the focus of the study. As for most tourist destinations, tourism in Tanzania is recognized as a vital sector in contributing to national investments, employment generation, foreign exchange generation, and sustainable developments. For the past ten years (2009-2019), the tourism sector in Tanzania grew at an average annual rate of 12 percent, and it contributes around 30 percent of export earnings while accounting for 10.9 percent of the total employment, and 9.5 percent of total investments in the country (Anderson, 2018; Njoroge, 2019).

In addressing the research question, the study a) examines EO factor structure using exploratory factor analysis; b) conducts reliability assessment of EO dimensions based on Cronbach alpha and composite reliability; c) examines the correlations among the EO dimensions based on confirmatory factor analysis and d) validates the dimensions of EO in the hospitality context based on convergent and discriminant validity tests. Clarifying on the dimensionality of EO and the relationships among its dimensions in the hospitality industry is important both theoretically and practically. Theoretically, conceptualizing EO as a single composite construct can largely mask individual impacts of specific dimensions of EO on business performance. Moreover, based on the true nature of EO dimensionality it becomes practical for hospitality firms to distribute business resources based on the contribution of each dimension while exploiting business opportunities.

Literature Review

Although, entrepreneurial orientation (EO) signifies the extent to which a firm is entrepreneurial in exploring and exploiting business opportunities, there are different approaches to how it is conceptualized. EO concept has its origin in the strategic management domain (Mintzberg, 1973; Miller, 1983) originally construed as firms' strategic posture (Covin and Slevin, 1989). Miller (1983) asserted that such firm-level entrepreneurial processes embrace three dimensions: innovation, proactiveness, and risk-taking. To operationalize and measure firms' strategic posture, Covin and Slevin (1989) developed a nine-item scale based on Miller's three dimensions. Miller's/Covin and Slevin's scale has widely been used in EO research (Rauch *et al.,* 2009; Saeed et al., 2014).

On the other hand, Lumpkin and Dess (1996) offered an alternative contention that firms' entrepreneurial processes are manifested by five dimensions: innovation, proactiveness, risk-taking, autonomy and competitive aggressiveness. In other words, Lumpkin and Dess (1996) contend that the three original dimensions do not sufficiently capture the domain of firm-level entrepreneurial processes, thus proposed the aggressiveness and autonomy. Such diverse conceptualizations imply that EO is a contextual specific phenomenon.

Studies such as Krauss *et al.* (2005) and Eijdenberg (2015) indicate that EO construed in western countries contexts is not necessarily relevant in promoting business performance in the informal environments, particularly in emerging economies like Tanzania. Such observations are also

consistent with the consensus that EO tends to manifest contextually (Lumpkin and Dess, 1996; Miller, 2011; Monsen and Boss, 2009; Wales *et al.,* 2019). Moreover, some studies based on factor analyses suggest that indicators of innovativeness, pro-activeness, and risk-taking tend to shift across different dimensions (Lumpkin and Dess, 2001; Monsen and Boss, 2009; Njoroge *et al.,* 2019; Njoroge *et al.,* 2020) depending on the context. For example, in the Southern Africa context, Matchaba-Hove *et al.* (2015) revealed that EO constitutes a composite EO dimension which they called 'proactive-innovativeness'. Moreover, some research conducted in Africa treats communication (Kropp *et al.,* 2006) as well as learning and achievement orientations and personal initiative (Krauss *et al.,* 2005) as dimensions of firms' EO.

The diversity of EO conception is not only limited to national contexts rather it extends to industry and sectoral domains. For instance, Tajeddini (2010) regarded innovativeness and EO as two separate aspects that can influence hotels' performance in Switzerland. It, therefore, remains unclear how EO scales based on the manufacturing industries (Miller,1983; Covin and Slevin, 1989; Naman and Slevin, 1993) are reflective and applicable to other contexts like the hospitality industry. The one-size fits all approach has led to contradictory conclusions that EO is not an important aspect in improving hotels' performance (Oktavio *et al.,* 2019). Confirming that EO manifests differently in the hospitality contexts, recent studies such as Njoroge *et al.* (2020) reveal that EO in the hospitality industry consists of innovativeness, proactive-risk-taking and hotels' competition approach. Based on such an approach, proactive-risk-taking consists of firms' exploration intensity with wide-ranging acts; taking bold and risk decisions; favourability to risks in exploiting potential opportunities; proactive opportunities exploration and initiation speed towards changes and actions relative to competitors. Moreover, innovativeness embraces four issues: emphasis on quality services; standardization of services; product introduction; and technology usage. On the other hand, Njoroge *et al.* (2020) indicate that competition approach focuses on extensive marketing; customer relationship management and pricing flexibility based on the competition intensity. Since this present study examines the dimensionality of EO in the hospitality industry, it accordingly adopts EO conceptualization confirmed by Njoroge *et al.* (2020).

The dimensionality of a construct is an important issue in social science research; however, few studies have empirically tested the dimensionality of theoretical constructs (Stetz *et al.,* 2000; Kreiser *et al.,* 2002; Jiang, 2006). A possible explanation is the uncertainty of how best to proceed with such tests (Jiang, 2006). The EO concept is commonly classified as either unidimensional (Covin and Slevin, 1989) or multidimensional (Lumpkin and Dess, 1996) construct. Unidimensionality perspective regards EO as a composite measure which is the aggregation of EO dimensions or as a second-order construct with its dimensions treated as first-order factors (Jarvis *et al.,* 2003; Njoroge, 2019). Unidimensionally, EO may be claimed to exist if there is a strong co-variation among its dimensions. That is, if any of the dimensions is missing entirely, the process would be deemed less entrepreneurial (Miller, 2011). On the contrary, considering EO as a multidimensional construct implies that each dimension can independently influence business performance (Lumpkin and Dess, 1996). Treated as a multidimensional construct, the dimensions of EO need to either correlate or vary independently in influencing the outcome variable. That is, they need not strongly and positively covary for the EO dimensions to

be claimed to exist (Lumpkin and Dess, 1996). Whether EO in the hospitality context appropriately fits the unidimensional and multidimensional specification is an open question.

The unidimensional or multi-dimensional specification has different analytical and theoretical implications. Most studies in the hospitality context pre-suppose that EO is a unidimensional construct (Jogaratnam and Tse, 2006; Seilov, 2015; Vega-Vázquez *et al.*,2016; Jogaratnam, 2017). However, such conception has not been entirely fruitful in understanding the role of EO on business performance. While Hernández-Perlines (2016) and Jogaratnam (2017) found that composite EO influences business performance positively, Eijdenberg (2015) revealed that competitive aggressiveness exhibits unfavourable influence on performance. On the other hand, Simmons (2010) reveals that risk-taking is an important EO dimension for business performance while innovativeness, proactiveness and competitive aggressiveness are not. Likewise, Jogaratnam and Tse (2006) and Vega-Vázquez *et al.* (2016) indicate that aggregate EO exhibits no effect on the performance of hospitality firms. Such contrasting conclusions suggest a need for examining the true nature of EO dimensionality in the hospitality industry.

Several approaches are often employed in testing whether a construct is unidimensional or multidimensional. They include maximum likelihood ratio test, confidence interval test or a vanishing tetrads test (Jiang, 2006). In principle, all these methods aim to test whether the correlation between two latent dimensions is equal to one or not (Stetz *et al.*, 2000; Jiang, 2006). In other words, the unidimensionality of a construct is confirmed when there is a perfect correlation among its dimensions (Joreskog, 1974; Bollen and Grandjean, 1981). Accordingly, based on EO studies such as Stetz *et al.* (2000), this present study examines the dimensionality of EO by examining three issues: First, are the dimensions (innovativeness, proactive-risk-taking, and competition approach) of EO in hospitality context separate, distinct and independent? Second, do the dimensions of EO covary (correlate) perfectly? and lastly, do EO dimensions converge towards a high order EO construct? Therefore, for conceptual and analytical purposes, the three aspects of EO dimensionality are conceptualized as illustrated in Figure 1.

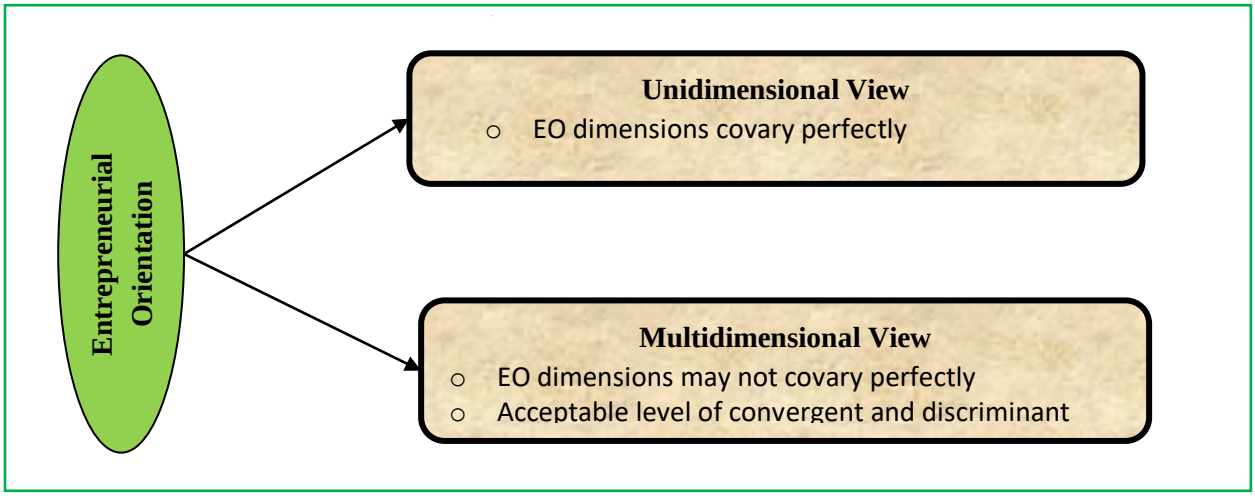

Figure 1. Conception of the dimensionality of entrepreneurial orientation

Methods

This study examines the dimensionality of EO in the hospitality industry with evidence from Tanzania. Quantitative techniques (Saunders *et al.,* 2012) were utilized to collect data, analyze and report findings as described in the following sections.

Sample and Data Collection

This study is based on a survey of tourist hotels in the Northern (Arusha and Kilimanjaro) and Coastal (Zanzibar and Dar es Salaam) Tourism Circuits of Tanzania. These regions are selected because they host a large number of tourist hotels in the country (MNRT, 2017; Zanzibar Commission for Tourism, 2015). The data used in this study were collected using directly administered questionnaires. Before that, questionnaires were first pilot-tested and refined accordingly to ensure understandability, remove ambiguities and improve clarity as recommended by Saunders *et al.* (2012). The questionnaires were administered to 400 randomly selected hotels in the four regions. Hotel managers were requested to respond to each of the 15 scale statements on EO (Appended). This validated EO scale in the hospitality context is based on Njoroge (2019) and Njoroge *et al.* (2020). In accordance to Njoroge *et al.* (2020) validated dimensions for EO in the hospitality industry used in this study are summarized in Table 1.

Table 1. Indicators of EO in the context of Hospitality Industry

Innovativeness
1:Technology Usage
2:Standardized Services
3:Quality Goods and Services
4:Product Introduction
Proactive- Risk-Taking
1:Opportunities Exploitation
2:Initiation Speed
3:Favourability to Risks
4:Exploration Intensity
5:Bold and Risk Decisions
Competition Approach
1:Pricing flexibility
2:Extensive marketing
3:Customer relationship management

Source: Njoroge *et al.* (2020)

A total of 348 hotels responded to the survey (a response rate of about 87 percent). Missing data analysis was performed and revealed that there were 63 cases with at least one data value missing, equivalent to a total of 18.1 percent. Therefore, on average missing data per case was around 0.3 percent (18.1/63). Only two cases (ID106 and ID277) exhibited missing data above

10 percent. The two cases were deleted and the mean substitution method was used to impute the remaining missing data in line with Hair *et al.* (2014). The characteristics of the usable sample (n=346) are summarized in Table 2.

Table 2. The Characteristics of The Surveyed Hotels

Hotel Attributes		Zbar	D'sm	Arusha	K'jro	Total	Total %
Hotel Type	Independent hotel	65	62	82	44	253	73
	Part of a hotel chain	44	19	18	12	93	27
Ownership structure	locals (Tanzanian) only	27	40	62	51	184	53
	both locals and foreigners	51	30	36	6	123	36
	foreigners only	25	10	3	1	39	11
Location	Beach	81	14	0	0	95	28
	Park	0	0	2	9	11	3
	Town	13	60	100	50	223	64
	Beach and Town	10	7	0	0	17	5
Hotel rating	3-Star	68	48	84	52	252	73
	4-Star	29	28	11	4	72	21
	5-Star	12	5	5	0	22	6
Total		109	81	100	56	346	100

Data Analysis

First, exploratory factor analysis (EFA) was used to establish the nature of the EO factor structure in the studied context utilizing principle component analysis with Oblique (Promax) rotation. The assumption is that EO factors are related to each other (Hair *et al.,* 2014; Field, 2018). SPSS 23 software was utilized to conduct the EFA to identify the latent dimensions of EO inherent in the data. On the other hand, construct reliability was assessed using Cronbach's alpha and composite reliability (Fatma *et al.,* 2016). The recommended alpha threshold of 0.7 for Cronbach's alpha and composite reliability was adhered to (Hair *et al.,* 2014).

Next, the validity of the EO dimensions was assessed based on confirmatory factor analysis (CFA) (Hair *et al.,* 2014). Based on Hair *et al.* (2014), model diagnostics were undertaken by examining standardized residuals; path estimates; and modifications indices to refine and

improve the EO measurement model. The AMOS 23 software was used in this regard to generate the model fit indices and test whether the specified EO model is theoretically consistent (Hair *et al.,* 2014). This was achieved by assessing models' goodness-of-fit indices [Chi-square *(χ2)/df,* Goodness-of-Fit Index (GFI), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI)]. The estimated values of these indices were evaluated against the recommended thresholds (Hair *et al.,* 2014).

Thereafter, EO construct validity was further ascertained using convergent and discriminant validity tests. Convergent validity test was essential to confirm how well measured indicators converge or share a high proportion of variance in common (Hair *et al.,* 2014). To achieve this, average variance-extracted (AVE) and composite reliability for the EO dimensions were examined(Fornell and Larcker, 1981; Hair *et al.,* 2014). Discriminant validity was assessed by comparing the square root of AVE for each dimension with inter-construct correlations associated with that dimension (Hair *et al.,* 2014). This enabled to establish how truly the EO dimensions are distinct and independent from one another. This approach is consistent with Stetz *et al.* (2000).

Findings and Discussion

EFA indicates that hotels' EO consists of three dimensions: Innovativeness (INV), Competition Approach (CSt) and Proactive-Risk taking (PRT), a combination of pro-activeness and risk-taking attributes. The values of Cronbach's alphas for Innovativeness; Competition Approach; and Proactive-Risk-Taking are .74; .70; and .87 respectively. Moreover, composite reliability for each dimension is reasonably above the minimum threshold of 0.7, confirming that each dimension exhibits an adequate level of internal consistency and is reliably measured in line with Hair *et al.* (2014) guidelines.

Based on CFA, the model fit indices confirm the validity of underlying dimensions as illustrated by the EO measurement model in Figure 2. As indicated in the model, all model fit indices are within the recommended thresholds in line with Hair *et al.* (2014). This was achieved after eliminating three indicators (PRO1-Market Leadership; INV4-Speed to Market and CSt1-Price Undercutting). CFA model further indicates that the EO dimensions exhibit low to moderate correlations with each other. The correlations are regarded as low-to-medium in comparison to perfect correlations which is a condition for the unidimensionality of a construct (Stetz *et al.,* 2000; Jiang, 2006). The correlation between Proactive-Risk taking and Innovativeness is .52; the correlation between Innovativeness and Competition Approach is .52 while the correlation between Proactive-Risk taking and Competition Approach is .55. Because the dimensions have correlations equal to 1, it implies that the three EO dimensions may vary independently of one another. This is consistent with the assertions set forth by Kreiser *et al.* (2002) and Lumpkin and Dess (1996). Essentially, this finding confirms that EO in the hospitality industry exhibits multidimensionality.

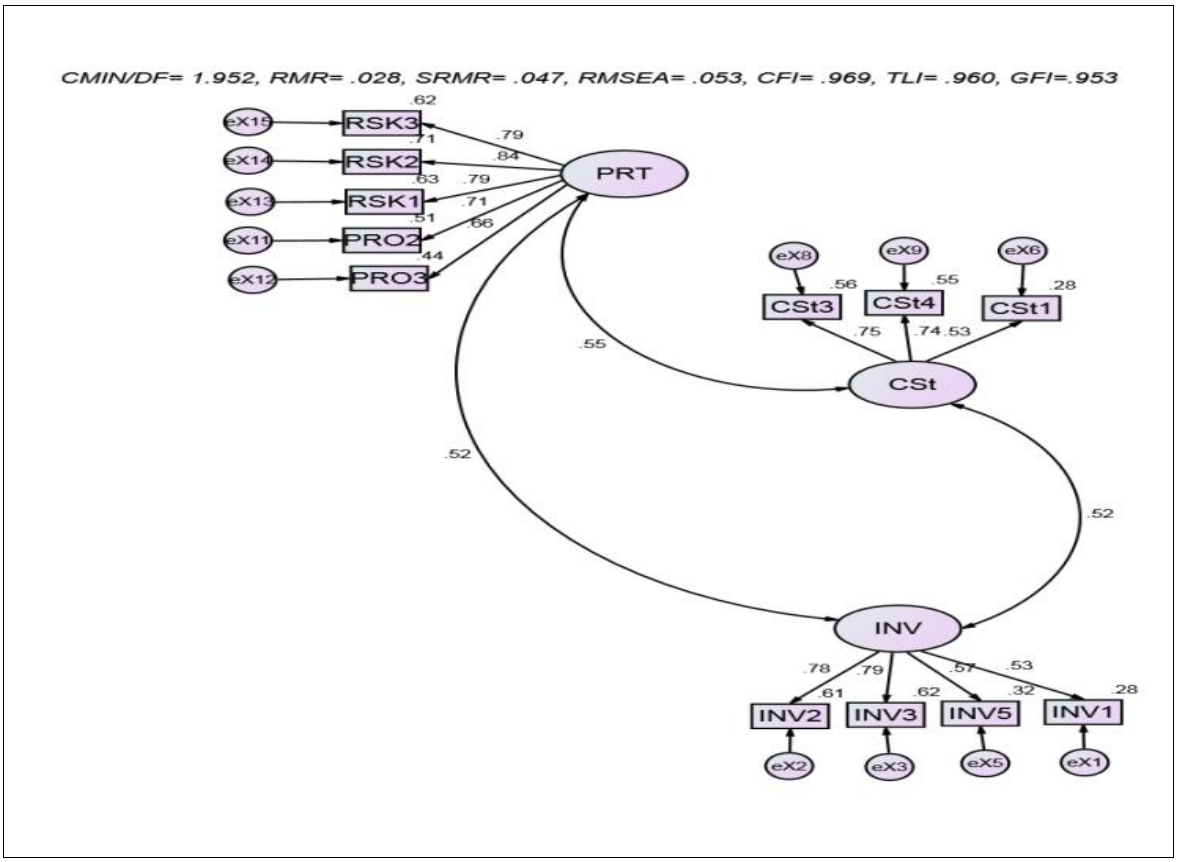

Figure 2. Entrepreneurial Orientation Measurement Model

Note: RSK; PRO; INV and CSt are scale items for-Risk-taking; Proactiveness; Innovativeness and Competition Approach respectively.

Furthermore, the results on the construct validity test further confirm that EO exhibits multidimensionality. The AVEs for all dimensions are at least 0.5 while composite reliability for each dimension is well above the minimum threshold of 0.7. This implies an acceptable level of convergent validity in that indicators for each EO dimensions converge or share a high proportion of variance in common. Moreover, discriminant validity results indicate that all the AVEs are greater than corresponding inter-construct correlations squared (Table 3). This implies that each dimension of EO in the measurement model is truly distinct from other dimensions. This is consistent with Fornell and Larcker (1981) guidelines.

Table 3. Convergent and Discriminant Validity Tests

	PRT	INV	CSt
Proactive-Risk-Taking (PRT)	1		
Innovativeness (INV)	0.52	1	
Competition Approach (CSt)	0.55	0.52	1
	PRT	INV	CSt
Composite Reliability (CR)	0.9	0.8	0.8
Average Variance-Extracted (AVE)	0.6	0.5	0.7
Square Root of AVE	0.8	0.7	0.8

Implications and Conclusions

In the hospitality context, this study adds to the body of knowledge that EO is multidimensional as indicated by low-to-moderate correlations among its dimensions. The level of correlations is considered low-to-moderate compared to perfect correlations which commonly used as an indicator for the unidimensionality of a construct (Joreskog, 1974; Bollen and Grandjean, 1981; Jiang, 2006). Moreover, the discriminant validity being satisfactorily acceptable also confirms that EO is framed around three distinct dimensions. This empirical finding enriches other hospitality studies such as Jogaratnam (2017), Hernández-Perlines (2016), and Seilov (2015) that consider EO as merely unidimensional. The multidimensionality EO observed in this study is consistent with non-hospitality studies such as Kreiser *et al.* (2002) and Covin *et al.* (2006). In the emerging country contexts like Tanzania, this finding supports the multidimensionality nature as hypothesized in studies such as Eijdenberg (2015) and Philemon and Kessy (2016).

Understanding EO dimensionality and the relationships among its dimensions in the hospitality industry is important both theoretically and practically. Theoretically, the results imply that EO in the hospitality industry also needs to be considered a multidimensional phenomenon to exploit the full potential of entrepreneurial processes. The specification of the relationships among the EO dimensions and how the dimensions relate to the overall EO concept are central in EO research not only for future theory building but also in the conceptual operationalization in theory testing. That is modelling EO as a mere single composite (unidimensional) construct (Covin and Slevin, 1989) is a narrow approach as it can largely mask the specific and independent contributions of specific EO dimensions on business performance as revealed in Lechner and Gudmundsson (2014) and Vega-Vázquez *et al.* (2016).

Accordingly, based on the multidimensional EO perspective, hospitality firms can benefit by appropriately allocating resources based on the importance of a particular dimension. In other words, to allocate resources in a way that benefits hospitality businesses, managers must be

observant of the role of individual EO dimensions. Moreover, positive and significant correlations between the EO dimensions imply that hotels' entrepreneurial efforts have to be aligned in a similar direction to appropriately exploit market opportunities.

References

Anderson, W. (2018). Linkages between tourism and agriculture for inclusive development in Tanzania: A value chain perspective. *Journal of Hospitality and Tourism Insights*, *1*(2), 168-184.

Bollen, K. A., and Grandjean, B. D. (1981). The dimension (s) of democracy: Further issues in the measurement and effects of political democracy. *American Sociological Review*, *46*(5), 651-659.

Covin, J. G., and Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75-87.

Eijdenberg, E. L. (2016). Does one size fit all? A look at entrepreneurial motivation and entrepreneurial orientation in the informal economy of Tanzania. *International Journal of Entrepreneurial Behavior and Research*, *22*(6), 804-834.

Fatma, M., Rahman, Z., and Khan, I. (2016). Measuring consumer perception of CSR in tourism industry: Scale development and validation. *Journal of Hospitality and Tourism Management*, *27*, 39-48.

Field, A. (2018). *Discovering statistics using IBM SPSS statistics*.(5th edition). Sage, London.

Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50.

Hair, J. F., Black, W. C., Babin, B. J., and Anderson. (2014). *Multivariate data analysis*.(7th Edition). Pearson, London.

Hernández-Perlines, F. (2016). Entrepreneurial orientation in hotel industry: Multi-group analysis of quality certification. *Journal of Business Research*, *69*(10), 4714-4724.

Jarvis, C. B., MacKenzie, S. B., and Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, *30*(2), 199-218.

Jiang, N. (2006). Three tests of dimensionality in structural equation modeling: A Monte Carlo simulation study. A thesis for award of degree in Master of Arts at University of North Carolina, Chapel Hill.

Jogaratnam, G. (2017). The effect of market orientation, entrepreneurial orientation and human capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, *60*, 104-113.

Jogaratnam, G., and Ching-YickTse, E. (2006). Entrepreneurial orientation and the structuring of organizations: performance evidence from the Asian hotel industry. *International Journal of Contemporary Hospitality Management*, *18*(6), 454-468.

Joreskog, K. G. (1974). Analyzing psychological data by structural analysis of covariance matrices. Pp. 45-100 in *Advances in Factor Analysis and Structural Equation models*, edited by J. Madgison. Lanham: University press of America.

Krauss, S. I., Frese, M., Friedrich, C., and Unger, J. M. (2005). Entrepreneurial orientation: A psychological model of success among southern African small business owners. *European Journal of Work and Organizational Psychology*, *14*(3), 315-344.

Kreiser, P. M., Marino, L. D., and Weaver, K. M. (2002). Assessing the psychometric properties of the entrepreneurial orientation scale: A multi-country analysis. *Entrepreneurship Theory and Practice*, *26*(4), 71-93.

Kropp, F., Lindsay, N. J., and Shoham, A. (2006). Entrepreneurial, market, and learning orientations and international entrepreneurial business venture performance in South African firms. *International Marketing Review, 23*(5), 504-523.

Lechner, C., and Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal, 32*(1), 36-60.

Lumpkin, G. T., and Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135-172.

Matchaba-Hove, T., Farrington, S., and Sharp, G. (2015). The entrepreneurial orientation-Performance relationship: A South African small business perspective. *The Southern African Journal of Entrepreneurship and Small Business Management, 7*(1), 36-68.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, *29*(7), 770-791.

Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice*, *35*(5), 873-894.

Ministry of Natural Resources and Tourism (MNRT, 2017), *Tourism Statistical Bulletin 2017*, Tourism Division, Ministry of Natural Resources and Tourism, Dar es Salaam.

Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, *16*(2), 44-53.

Monsen, E., and Boss, R. (2009). The impact of strategic entrepreneurship inside the organization: Examining job stress and employee retention. *Entrepreneurship Theory and Practice*, *33*(1), 71-104.

Naman, J. L., and Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic Management Journal*, *14*(2), 137-153.

Njoroge, M. (2019). Linking entrepreneurial orientation and corporate sustainability: A study of tourist hotels in Tanzania. A PhD Thesis for the award of doctoral degree at the University of Dar es Salaam, Tanzania.

Njoroge, M., Anderson, W., and Mbura, O., Mossberg, L. (2020). Entrepreneurial orientation in the hospitality industry: Evidence from Tanzania, *The Journal of Entrepreneurship in Emerging Economies*, DOI 10.1108/JEEE-11-2018-0122.

Oktavio, A., Kaihatu, T. S., and Kartika, E. W. (2019). Learning orientation, entrepreneurial orientation, innovation and their impacts on new hotel performance: Evidence from Surabaya. *JurnalAplikasiManajemen, 17*(1), 8-19.

Philemon, J. R., and Kessy, S. S. (2016). Top management characteristics and firms' performance in Tanzania: A case of selected firms. *Business Management Review, 18*(2), 1-31.

Rauch, A., Wiklund, J., Lumpkin, G. T., and Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, *33*(3), 761-787.

Saeed, S., Yousafzai, S. Y., and Engelen, A. (2014). On cultural and macroeconomic contingencies of the entrepreneurial orientation–performance relationship. *Entrepreneurship Theory and Practice*, *38*(2), 255-290.

Saunders, M., Lewis, P., Thornhill, A., and Wilson, J. (2012). *Business Research Methods*. Financial Times, Prentice Hall: London.

Seilov, G. A. (2015). Does the adoption of customer and competitor orientations make small hospitality businesses more entrepreneurial? Evidence from Kazakhstan. *International Journal of Contemporary Hospitality Management*, *27*(1), 71-86.

Simmons Jr, J. D. (2010). *The effects of firm size on the entrepreneurial orientation dimensions of innovativeness, proactiveness, and risk-taking*. Doctoral dissertation, Ohio University.

Stetz, P. E., Howell, R., Stewart, A., Blair, J. D., and Fottler, M. D. (2000). Multidimensionality of entrepreneurial firm-level processes: Do the dimensions covary? *Frontiers of Entrepreneurship Research(2000)*, 653-667.

Tajeddini, K. (2010). Effect of customer orientation and entrepreneurial orientation on innovativeness: Evidence from the hotel industry in Switzerland. *Tourism Management*, *31*(2), 221-231.

Vega-Vázquez, M., Cossío-Silva, F. J., and Revilla-Camacho, M. Á. (2016). Entrepreneurial orientation–hotel performance: Has market orientation anything to say? *Journal of Business Research*, *69*(11), 5089-5094.

Wales, W., Gupta, V. K., Marino, L., and Shirokova, G. (2019). Entrepreneurial orientation: International, global and cross-cultural research. *International Small Business Journal*, *37*(2), 95-104.

Zanzibar Commission for Tourism (ZCT, 2015), Strategic Plan for Zanzibar Commission for Tourism (2015-2020).

APPENDIX: Research Questionnaires

Please circle one option that best describes the hotel on the following statements (1= strongly disagree while 5= strongly agree).

This hotel.....	strongly disagree	disagree	Neither agree nor disagree	agree	strongly agree
INV1-strongly emphasizes and capitalizes on technological advancements	1	2	3	4	5
INV2-provides highly standardized services based on its brand	1	2	3	4	5
INV3-maintains its market share by providing quality goods and services	1	2	3	4	5
INV4-has marketed a lot of new products and services in previous years	1	2	3	4	5
INV5-usually experiences quite dramatic changes in product and service lines	1	2	3	4	5
PRO1-is often the first to introduce new services and administrative techniques	1	2	3	4	5
PRO2-adopts a very proactive approach in exploiting markets opportunities	1	2	3	4	5
PRO3-normally initiates changes and actions upon which competitors respond to	1	2	3	4	5
RSK1-has strong tendency toward getting involved in high risk-high yield projects	1	2	3	4	5
RSK2-exercises bold, wide-ranging acts necessary to achieve hotel's objectives	1	2	3	4	5
RSK3-typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities	1	2	3	4	5
CSt1-is flexible in pricing, given the nature of competition in the industry	1	2	3	4	5
CSt2-sometimes undercut prices (rates) to cope with competition	1	2	3	4	5
CSt3-engages in aggressive marketing of its services	1	2	3	4	5
CSt4-maintains a very close customer relationship management	1	2	3	4	5

Effect of Word-of-Mouth Dimensions on Brand Loyalty: A case of mobile money services in Tanzania

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Abstract: *This paper aimed at determining the individual effects of WOM dimensions (Positive Valence WOM, Negative Valence WOM, WOM content, and WOM intensity) on brand loyalty in the Tanzanian mobile money service industry. The research areas included Sumbawanga and Mpanda Municipal councils from Rukwa and Katavi regions respectively. A structured questionnaire was used to collect data from 300 randomly selected respondents whereas Structural Equation Modeling was applied to analyze the collected data. The findings from this study reveal that Positive Valence WOM, WOM content and WOM intensity have a positive and significant impact on brand loyalty. However, Positive Valence WOM was highly influential than other WOM dimensions. The results also indicate that negative Valence WOM has a negative impact on brand loyalty. The paper concludes that the studied WOM dimensions are predictors of brand loyalty except for the Negative Valence WOM. Thus, it is recommended that mobile money operators (MMOs) should give more emphasis on creating Positive Valence WOM if they are to greatly benefit from WOM recommendation which is less cost full but more powerfully marketing tool than any other marketing tool.*

Key words: Brand loyalty, Word of Mouth, Mobile Money Services, Tanzania

Introduction

Brand loyalty is a well-researched marketing concept that has been widely discussed by numerous researchers and business practitioners over the past decades. The majority of scholars have focused on conceptualizing, measuring, and identifying the factors influencing the loyalty of customers towards different brands. Brand loyalty is defined as a tendency of customers to be faithful to a brand by repurchasing it (Akhavanfar, 2015). On the other hand, WOM refers to the discussions held by customers on issues related to usage, features, and their personal experience about the product or service (Kumar, 2016).

Literature reveals that identifying factors that make customers loyal to brands is an important task to businesses for their survival in the market. There are many advantages of having loyal customers to the brand. For example, loyal customers have positive attitudes and behaviors like repeat patronage and purchases that may inspire other actual or potential customers (Ngoma & Ntale, 2019). Loyal customers are not prone to promotion lures, reduces marketing costs for businesses, act as a source of competitive advantage and increase profits to the organization

(Matonya, Jan-Erik & Ngaruko, 2019). Therefore, the success of business firms depends mainly on its ability to attract loyal customers.

However, in this competitive business situation, the great challenge of MMOs is finding better ways on how to make their customers loyal to their mobile money service brands. Using WOM recommendations as a factor for building loyalty of mobile money services seems to be the means through which MMOs can survive in the existing competition. This is because customers trust more on what their colleagues say about the particular service brand. WOM is also a low-cost strategy that produces a strong loyal customer base (Barreda, Bilgihan, Nusair & Okumus, 2015) and is thousands of times more powerful than conventional marketing (Silverman, 2011).

Recently, Tanzania has experienced remarkable growth in mobile money services and an increased number of mobile money service providers which has increased competition among mobile money operators (Matonya et al. 2019). A study by Ndesangia (2015) shows that most of the Tanzanian mobile phone customers are non-loyal as they change their mobile phone brands from time to time, according to the prevailing trend and fashion. Some of these customers have become multiple users of mobile money service brands. This problem has also been experienced in other countries. For example, a study by Yehia and Massimo (2016) in Spain also found that mobile phone customers are not loyal to mobile phone brands.

Consequently, scholars and marketing practitioners have been looking for factors that build the loyalty of customers towards different brands. However, evidence shows that no study encompasses all factors which influence brand loyalty (Matonya et al., 2019). There is much evidence that studies that considered the relationship between WOM and brand loyalty have generated inconsistent and debatable findings. Some studies (Balakrishnan, Dahnil & Yi, 2014; Ngoma & Ntale, 2019; Praharjo & Kusumawati, 2016) regards WOM as one of the antecedents of brand loyalty whereas others (Eelen, Özturan & Verlegh, 2017; Nikhashemi, Paim & Khatibi, 2015; Niyomsart & Khamwon, 2016; Wong, Kwok & Lau, 2015) have pointed out that brand loyalty is an antecedent of WOM. Kim and Hyun (2019) postulates that WOM has no impact on brand loyalty. This creates a research gap that needs to be filled and to ascertain the relationship between WOM and brand loyalty.

Moreover, the majority of studies have concentrated searching on the overall effect of WOM on brand loyalty while leaving the individual effect of WOM dimensions on brand loyalty under searched. Studies about the effect of WOM on brand loyalty are also scarce and focused on the developed countries. However, customer loyalty is context-specific (Ngoma & Ntale, 2019). Thus, there was a need to conduct this study to establish evidence of what drives customer's loyalty towards brands in developing countries particularly Tanzania. Hence, this paper aimed at determining the individual effects of WOM dimensions on brand loyalty. This study contributes to the theory of the relationship between WOM dimensions and brand loyalty as previous studies of this nature are limited particularly in the developing economies.

Literature Review

Brand loyalty

Brand loyalty refers to a consumer's commitment to continuously repurchase certain brands in the future, regardless of the situation and marketing efforts of other brands possibly making those customers switching brands (Semadi and Ariyanti, 2018). Brand loyalty is important to the development and sustainability of the mobile money services industry. It is the ultimate goal of companies aiming to be sustainable and save operational costs like marketing costs, particularly in the competitive business environment. Loyalty acts as a high bonding factor between the customer and a brand. Loyal customers are less sensitive to prices increases and are willing to pay premium prices for individual brands as opposed to other choices since they may have discernment of unique value in that individual brands (Shin, Amenuvor, Basilisco & Owusu-Antwi, 2019). Brand-loyal customers are also confident that the competing brands will not offers the exceptional value they are getting from their loyal brand. Hence, establishing loyal customers to your brands seems to be the best long term strategy of having a higher strong customer base and market share.

On the other hand, loyalty programs such as redeemable points, discounts, free items, and exceptional treatment to some customers are not always successful and that their short-term advantages lead to liabilities (Ong, Lee & Ramayah, 2018). The loyalty programs miss relevance, have inflexible reward structures, and entrenched with poor quality customer care (Magatef & Tomalieh, 2015). Moreover, the benefits accrued from short-term loyalty programs can easily become unattractive in case there is a price discount move from a competitor. In other words, loyalty generated through value saving motives in a loyalty program is not sustainable. This is because customers are more concerned with saving money and they can defect anytime to the other brand offered by a competitor perceived to provide better value and enjoyment. Hence establishing strong customer-brand relationships through measuring brand loyalty and finding factors influencing brand loyalty rather than loyalty programs is indisputable for marketing researchers and practitioners.

However, a review of the literature reveals that there have been different approaches used to measure brand loyalty. The earliest approach was the behavioral approach which based on the repetitive buying behavior of customers (Sheth, 1968). The author refers to behavioral loyalty as "a function of a brand's relative frequency of purchase in time-independent situations, and it is a function of relative frequency and purchase pattern for a brand in time-dependent situations" (p.398). The behavioral approach was challenged by not separating the true loyal buyers with spurious loyalty buyers. Hence another approach evolved namely attitudinal approach which includes the buyer's psychological commitment to repurchase the brand (Russell-Bennett, McColl-Kennedy & Coote, 2007). However, to measure true brand loyalty, researchers should use both the attitudinal and behavioral approaches (Pan, Sheng, & Xie, 2012; Saini & Singh 2020; Zhang *et al.,* 2020). Despite its usefulness, the two-dimension approach (behavioral and attitudinal approach) has produced inconsistencies and debate among scholars (Worthington, Russell-Bennett & Hartel, 2009). This led to the development of the tri-dimension which includes behavioral, emotional and cognitive loyalty. Cognitive loyalty is referred to as a

decision made by the customer to stay with a brand while considering the switching costs and brand's traits (Worthington *et al.* 2009). On the other hand, emotional loyalty is the degree of positive feelings triggered by repurchasing a respective brand. However, the current study opted for the attitudinal, behavioral and cognitive measurements to measure the true loyalty of customers towards mobile money service brands to add more knowledge on the brand management literature.

Word of Mouth

WOM refers to the discussions held by customers on issues related to usage, features, and their personal experience about the product or service (Kumar, 2016). According to Almossawi (2015), WOM is the condition where people talk about companies' products or services which may either be positive or negative. Customers use these discussions as a means for purchase decisions. According to Rakic and Rakic (2018, p.243) "A special advantage of WOM is the fact that personal or advertising messages originating as one-to-one communications can - and occasionally do – reach millions of customers within days".

However, the literature reveals that WOM has undergone three streams of researches. The first stream concentrated on searching as to why customers prefer to share information regarding the products and services they experience. Scholars in this group have come up with various reasons which include extreme satisfaction or dissatisfaction of service, product or brand (Anderson, 1998), uniqueness of the product or service (Bone, 1992), and commitment to the company (Dick and Basu, 1994). The second stream paid attention to searching for the circumstances under which customers rely on WOM to make their purchasing decisions. Scholars in this group have concluded that customers who are risk aversions in purchasing decisions (Bansal & Voyer, 2000), deeply participating in purchasing decisions (Bansal & Voyer, 2000) and those with little knowledge of product category (Gilly, Graham, Wolfinbarger & Yale 1998) are more likely to rely on WOM. The third stream focused on the reasons why some personal sources of information are more effective compared to others. Literature indicates that strong ties (Bansal & Voyer, 2000) and perceptual affinity (Gilly *et al.,* 1998) are amongst the reasons which make some sources of information to be more influential than others.

Moreover, scholars have realized that word of mouth is more powerfully than any other means of marketing communications. Earlier studies like that of Day (1971) and Buttle (1998) revealed that the ability of WOM in changing undesired tendency into positive attitudes is estimated to be nine times powerful as compared to advertising. On the other hand; Silverman (2011, p.58) pointed out that "WOM is thousands of times more powerful than conventional marketing". It worth mentioning also that, the power embedded in the WOM can be used to patronize or work against a particular brand. Hence, companies are forced to find ways that foster positive WOM recommendations as the traditional marketing like advertisement has reduced its efficiency and customers trust more on advice given by their fellows and relatives (Armelin, 2011). However, limited studies have been done while considering WOM as an antecedent of brand loyalty, particularly in the service industry. The extant literature also reveals that the few studies done have focused on developed economies leaving the developing economies such as Tanzania

under-researched. Hence this study was an attempt to fill this gap.

In measuring WOM, previous studies have used the uni-dimension (Kim, Han & Lee, 2001) whereas others used the multi-dimension (Andreia, 2012; Goyette, Richard, Bergeron & Marticotte, 2010) approach. Goyette *et al.* (2010) developed a comprehensive WOM measure for online customers as an effort to extend the work by Harrison-Walker who proposed a two-dimension scale: WOM praise and WOM activity (Harrison-Walker, 2001). In their study, Goyette, *et al.* (2010) proposed four dimensions namely WOM intensity (3 items), positive valence WOM (2 items), negative valence WOM (2 items) and WOM content (2 items). However, the current study, utilized the approach by Goyette *et al.* (2010) hence testing its suitability for offline customers.

Theories and Development of Hypotheses

From the social exchange theory (SET) literature (Homan, 1958, Blau, 1964), it is suggested that WOM recommendations from colleagues and relatives make existing and potential customers to be loyal to the brands. The theory postulates that a set of reciprocity relationships exists between individuals. For example, a customer using a certain mobile money service brand when gives positive WOM recommendation to another existing or potential customer, that customer will also become loyal to that brand as a reciprocity reaction to their relationship. This is because customers in the service industry have more trust in WOM given by their fellows who have experience with the service provider (Taghizadeh, Taghipourian & Kazhae 2013). Literature suggests that there is a paucity of information regarding the relationship between WOM and brand loyalty. On the other hand, existing studies have generated inconsistent and debatable findings. Other scholars (Balakrishnan *et al.*, 2014; Ngoma & Ntale, 2019; Praharjo & Kusumawati, 2016), see WOM as an antecedent to brand loyalty whereas others consider WOM as the consequence of brand loyalty (Nikhashemi *et al.*, 2015; Niyomsart & Khamwon, 2016; Wong *et al.*, 2015). Unlike these studies, Kim and Hyun (2019) and Rahayu (2018) studied the influence of WOM on brand loyalty. The results revealed that WOM does not influence brand loyalty. This provides the need to have more researches to establish the relationship between WOM and brand loyalty. However, this study considered WOM as an antecedent of brand loyalty. It was hypothesized that WOM influences brand loyalty. Specifically, the current study hypothesized that:

H1: Positive Valence WOM has a positive and significant impact on brand loyalty
H2: Negative Valence WOM has a positive and significant impact on brand loyalty
H3: WOM content has a positive and significant impact on brand loyalty
H4: WOM intensity has a positive and significant impact on brand loyalty

Methodology of the study

The current study applied the positivism research philosophy and deductive research approach as well as an explanatory research design. The research areas included Sumbawanga and Mpanda municipal councils from Rukwa and Katavi regions respectively. These areas were purposively

selected because they have low bank networks compared to major cities of the country such as Dar es Salaam, Arusha, Mwanza, Mbeya and Moshi (BOT, 2015). People in these regions are most likely to opt for mobile money services because of its flexibility and availability in the regions. The population for this study included business owners/staff who undertake day to day activities of micro, small and medium enterprises (MSMEs) in the study area. The total targeted population was 2300 (900 from Rukwa region and 1400 Katavi region) whereas the sampling frame was 695 (320 from Mpanda municipal and 375 from Sumbawanga municipal) business owners/staff of MSMEs who are involved with the day to day activities. A structured questionnaire was used to collect data from 300 randomly selected respondents for this study.

In selecting a sample size of 300 the authors based on the recommendations from previous scholars including Field (2009) who recommended that a researcher should have at least 10 – 15 respondents per variable. Kass and Tinsley (1979) suggested having between 5 and 10 respondents per variable up to a total of 300 (beyond which test parameters tend to be stable regardless of the participant to variable ratio). Besides, Tabachnick and Fidell (2013) regard 300 cases as sufficient for factor analysis. Nevertheless, Kline (2011) establishes that, for studies utilizing Structural Equation Modeling (SEM), 200 cases are the minimum recommended cases for analysis of the data. In measuring the variables, this study applied the scale items from preceding scholars. The 12 scale items from Jones and Taylor (2007) and Kuenzel and Halliday (2008) were used to measure brand loyalty whereas 9 scale items (2-WOM Content, 2- Positive Valence WOM, 2-Negative Valence WOM and 3-WOM intensity) from Goyette et al., (2010) were applied to measure WOM.

Data preparation

The collected data were checked for missing values, outliers and multicollinearity problem. It was observed that there were missing data on the income variable and researchers decided to drop that case and remained with 299 usable questionnaires. In identifying outliers, the Mahalanobis D statistic (Mahalanobis, 1936) was applied. According to DeSimone, Harms and DeSimone (2015), data values are viewed as outliers if the Mahalanobis distance (D2) values are higher than the Chi-square values of the items applied. On the other hand, multicollinearity was tested using Variance Inflated Factor (VIF) and Tolerance to check the presence or absence of discriminant validity. VIF values higher than 5 indicates the presence of multicollinearity (Hair, Black, Babin & Anderson, 2010). The reliability of the research instrument was measured by Cronbach's coefficient Alpha.

Data Analysis

This study utilized SEM for analyzing the collected data due to its demonstrated strengths. SEM is a comprehensive statistical method for hypotheses testing concerning the relationship between observed and latent variables (Matonya et al., 2019). SEM also clearly takes care of the measurement error in indicators of latent variables something which is difficulty for other traditional statistical methods such as multiple regression, correlation, and ANOVA. Besides, SEM tests construct validity broadly and more deeply compared to traditional correlation

analyses (Bagozzi & Yi, 2012). The study used IBM AMOS version 22 to run the measurement model and structural models. The measurement model was used to determine the reliability and validity of all constructs. Average Variance Extracted (AVE) and Composite Reliability (CR) were tested to check whether the measurement model was reliable. Fornell and Larcker (1981) recommend the thresholds values of 0.50 and 0.7 for AVE and CR respectively. On the other hand, validity was assured by attaining the minimum recommended factor loadings of 0.5. Multicollinearity was tested to ensure the absence of a discriminant validity problem. The structural model was used to test the hypotheses of this study.

Evaluation of the measurement model

This study applied the Confirmatory Factor Analysis (CFA) to test the measurement model where the model fit indices were utilized to examine if the model fitted the data well. Table 1 presents the fit indices used and their cut-off points. After conducting the CFA, the results for goodness of fit indices was as follows: CMIN/DF = 2.37, GFI = 0.87, AGF = 0.82. CFI = 0.94, PNFI = 0.72, PCFI = 0.75 and RMSEA = 0.08. Hence the measurement model fitted well the collected data and hence guaranteed the researchers to continue with the next step of testing the hypotheses using the structural model.

Table 1. Goodness-of-fit indices for the measurement model

Fit indices	**Cut off point**
The ratio of chi-square and degree of freedom(χ^2/df)	≤ 3
Goodness of Fit Index (GFI)	≥ 0.90
Comparative Fit Index (CFI)	≥ 0.90
Adjusted Goodness of Fit Index (AGFI)	≥ 0.80
Parsimony Normed Fit Index (PNFI)	≥ 0.50
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08
Parsimony Comparative Normed Fit Index (PCNFI)	≥ 0.50

Source: Al-Msallam (2015) and Kumar (2015).

Results and Discussion

Respondent's Demographic Characteristics

Table 2 reveals the age of respondents. It indicates that 48.8% of respondents aged between 20 and 30 years old while 36.5% had years ranging from 31 – 40 years. On the other hand, 9.7% had years between 41 -50 years and the rest (5%) were above 50 years. Table 2 also reveals that 51.8% of research participants were married individuals whereas single respondents occupied 46.2% of the studied population and the separated individuals were 1.3%. The distribution of research participants regarding the level of education is also presented in Table 2. It indicates that 38.5% of respondents had secondary school education and 24.4% had attended certificate or diploma education. Table 2 also reveals that graduate respondents and those with primary level education occupied 19.7% and 13.7% respectively. The least number of participants (3.7%) was

recorded from the postgraduate education group. Table 2 also postulates that M-Pesa occupied the largest customer base (63.9%) in the studied areas compared to other mobile money service providers followed by Tigo-Pesa which occupy 14.4% of market share. On the other hand, Airtel money was the third with 11.4% and Ezy-Pesa had the least customer base (0.7%) among the respondents.

Table 2. Respondent's Demographic Characteristics

Gender	**Frequency**	**Percent**
Male	176	58.9
Female	123	41.1
Total	**299**	**100**
Marital status		
Married	155	51.8
Single	138	46.2
Widowed	2	.7
Separated	4	1.3
Total	**299**	**100.0**
Level of education		
Primary school	41	13.7
Secondary school	115	38.5
Certificate/diploma	73	24.4
Graduate	59	19.7
Postgraduate	11	3.7
Total	299	100.0
Mobile money service		
M-Pesa	191	63.9
Airtel Money	34	11.4
Tigo-Pesa	43	14.4
Halo-Pesa	29	9.7
Ezy-Pesa	2	0.7
Total	**299**	**100**

Multicollinearity statistics

The findings reveal that there was no multicollinearity problem as VIF attained the recommended values. Table 3 reveals that the VIF values ranged from 1.26 to 1.59 which meets the recommended values. Hair et al. (2010) regard VIF values higher than 5 indicate the presence of multicollinearity. The results from Table 4 also support the absence of a multicollinearity problem by showing a correlation of less than 0.8.

Table 3. Multicollinearity statistics

Measured variables	**Collinearity Statistics VIF**
WOM intensity	1.38
WOM content	1.26
Positive Valence WOM	1.59
Negative Valence WOM	1.55

Table 4. Correlations

1	1	2	3	4	5	**6**
2	Positive valence WOM	1				
3	Negative valence WOM	.560**	1			
4	WOM content	.358**	.342**	1		
5	WOM intensity	.409**	.392**	.377**	1	
6	Brand loyalty	.545**	.393**	.406**	.442**	1

Exploratory Factor Analysis

There were three facets that the researchers considered in deciding the suitability of the data for factor analysis. The three aspects were sample size, factorability of the correlation matrix and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, and Bartlett's Test of Sphericity. Regarding sample size, Hair et al. (2010) posit that sample sizes should be just 100 or larger. Tabachnick and Fidell (2007) on the other hand, recommend having at least 300 cases for factor analysis. The current study used a sample size 300 which meets the recommendations of previous scholars.

In measuring sampling adequacy or whether data could be factored well, Hair et al. (2010) recommend the KMO greater than 0.6 and Bartlett's Test of Sphericity must be significant at $\alpha <$ .05. The results of this study indicate that KMO was 0.874 and Bartlett's Test of Sphericity was significant at $\alpha < .0.5$ as shown in Table 5. These findings suggest that the data were suitable to proceed with exploratory factor analysis. The communalities for each item were also determined and the results ranged from 0.400 to 0.738. These results were in agreement with the recommended value of greater than 0.3 (Tabachnick & Fidell, 2007).

We used Principal Axis Factoring with Direct Oblimin rotation to examine the fundamental structure of the scale items used. Three criteria were utilized to retain factors namely

Eigenvalues, factor loadings, and scree test (i.e. scree plot). Kaiser (1960) suggest retaining all factors with Eigenvalues higher than 1. Yong and Pearce (2013) recommends to retain factors with factor loading greater than 0.32 and all data points above the break/cut off point of the scree plot. However, the screen test criterion is considered reliable only when the sample size is not less than 200 (Yong and Pearce, 2013). Using the above criteria, four factors were extracted which explained 72.567% of the cumulative variance, and both had Eigenvalues greater than one (Appendix 2). Four items from brand loyalty namely BL9, BL10, BL11, and BL12 were dropped. BL9 and BL11 had multiple loadings and BL10 and BL12 did not meet the minimum requirement of factor loadings. The retained scale items had factor loadings ranging from 0.615 to 0.913 (Appendix 1). On the other hand, Appendix 3 indicates the scree plot of factors extracted as suggested by Yong and Pearce (2013).

Table 5. KMO, Bartlett's Test and communalities

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.874
Bartlett's Test of Sphericity	Approx. Chi-Square	2454.434
	df	136
	Sig.	.000
Communalities (Range)	0.400	0.738

Measurement model results

The CFA results reveal that the measurement model fitted the data as the fit indices threshold was met. The factor loadings of the measurement model range from 0.52 to 0.96 as shown in Table 6 and Figure 1. The fit indices and factor loadings result guaranteed the researchers to continue with the next step of testing the hypotheses using the structural model. On the other hand, Table 6 reveals that the Cronbach's Alpha values and Composite Reliability ranged from 0.83 to 0.92 and from 0.90 to 0.95 respectively. These findings surpass the suggested values of 0.7 (Nunnally & Bernstein, 1994). These findings confirm that the research instrument was reliable for the current study. Moreover, the results indicate that the square root of the Average Variance Extracted (AVE) of each variable exceeded the correlations between that variable and all other variables indicating that discriminant validity was achieved (Fornell & Larcker, 1981). It was found that the least square root of AVE in this study is 0.769 whereas the highest inter-variable correlation value is 0.560. The findings also suggest that convergent validity was not a problem as evidenced by the factor loadings of the measurement model in Table 6. The majority of items have factor loadings higher than 0.7 except one item from brand loyalty construct which was 0.52 though it also attained the minimum threshold (Fornell & Larcker, 1981). This means that majority of items explained more than 70% of what they were expected to measure.

Table 6. Accuracy Analysis of Statistics

Measured variables	**Cronbach's Alpha**	**AVE (Average Variance Extracted)**	**CR (Composite Reliability)**	**Factor loadings**
WOM intensity				
WIN1	0.899	0.751	0.944	0.88
WIN2				0.89
WIN3				0.82
WOM content				
WC1	0.906	0.834	0.949	0.86
WC2				0.96
PV1	0.863	0.760	0.922	0.87
PV2				0.87
Negative Valence WOM				
NV1	0.826	0.71	0.899	0.79
NV2				0.85
Brand loyalty				
BL1	0.915	0.591	0.951	0.73
BL2				0.78
BL3				0.86
BL4				0.85
BL5				0.83
BL6				0.73
BL7				0.52
BL8				0.79

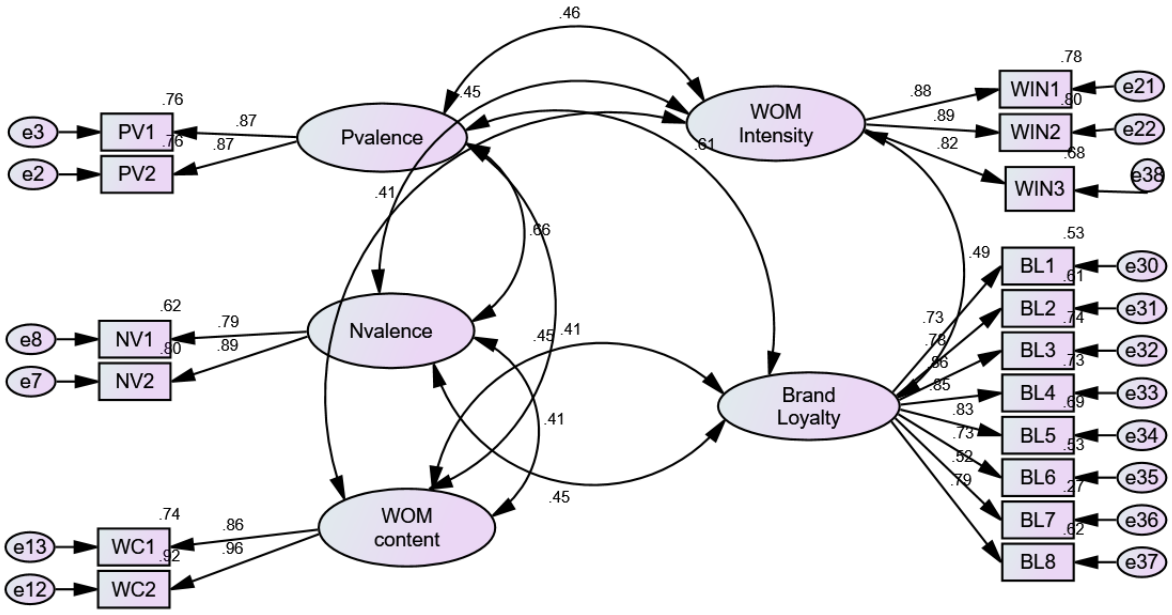

Figure 1: Measurement model of the study

Structural model Results

After ensured that the measurement model fitted the data, researchers decided to test the four hypotheses of the current study. However, before testing the structural model, researchers checked for its fitness using similar goodness of fit indices previously utilized to test the measurement model. It was found that the structural model attained the recommended goodness of fit indices.

In testing hypotheses, three criteria were used to establish the relationships between the individual WOM dimensions and brand loyalty. These include setting p-value at 5% and t = 1.96 and standardized regression weights (ß) of at least 0.2 as recommended by Hox and Bechger (1998) and Chin (1998) respectively.

The results from Table 7 indicate that a path from Pvalence (positive valence WOM) to brand loyalty attained a critical ratio of 4.438 and a significant p-value of .001 which meets the recommendation of Hox and Bechger (1998). Besides, the ß values of 0.437 from this path concur with Chin (1998) who posited that meaningful discussion is achieved when the standardized paths have a value of at least 0.2. Thus, the p-values, the ß values, and the critical values depict that Positive valence WOM has a positive and significant effect on brand loyalty.

Hence, H_1 which states that Positive Valence WOM has a positive and significant impact on brand loyalty was accepted.

The findings from Table 7 also reveal that a path from Nvalence (negative valence WOM) to brand loyalty has a critical ratio of -.144 and a non-significant p-value of 0.886 which deviates from the recommendation by Hox and Bechger (1998). On the other hand, the ß values of -.013 of a path from Nvalence to brand loyalty as shown in Table 7 also do not meet the recommendations by Chin (1998). Hence, the p-values, the ß values, and the critical values portray that Negative valence WOM has a negative effect to brand loyalty. Thus, H_2: Negative Valence WOM has a positive and significant impact on brand loyalty was rejected.

Table 7 also reveals that a path from WOM content to brand loyalty generated a critical ratio of 2.715 and a significant p-value which supports the recommendation by Hox and Bechger (1998). The ß values of 0.189 for this path also were in harmony with the suggestions given by Chin (1998). Thus, the critical ratio values, ß values, and p-values obtained suggest that WOM content has a positive and significant effect on brand loyalty. Hence, H_3 which postulated that WOM content has a positive and significant impact on brand loyalty was accepted.

The findings in Table 7 show that a path from WOM intensity to brand loyalty has critical ratio values of 2.998 and significant p-value. These results meet the recommendation by Hox and Bechger (1998) which states that the significant relationship between variables is attained when the critical ratio is 1.96 and has a significant p-value at 5%. On the other hand, the ß values were 0.221 which meets the recommendation by Chin (1998). Thus, the critical ratio values, the ß values, and p-values obtained suggest that WOM content has a positive and significant effect on brand loyalty. This leads to acceptance of H_4 which postulated that WOM intensity has a positive and significant impact on brand loyalty. The results are also indicated in Figure 2.

Table 7. Hypotheses testing results

Path			t	ß	P	Results
Brand_Loyalty	<---	Pvalence	4.438	.437	***	Supported
Brand_Loyalty	<---	Nvalence	-.144	-.013	.886	Not supported
Brand_Loyalty	<---	WOM_content	2.715	.189	.007	Supported
Brand_Loyalty	<---	WOM_Intensity	2.998	.221	.003	Supported

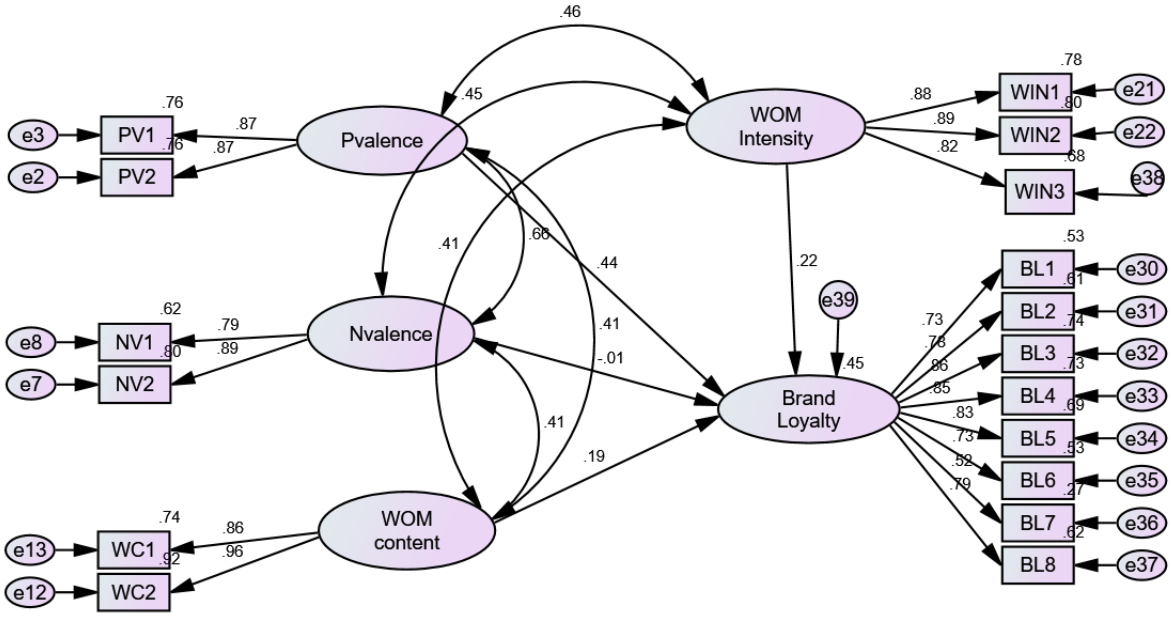

Figure 2: Structural model of the study

Discussion of the findings

The findings of this study suggest that large number of respondents were in the economically active group of people in the country. This is good news to the study area and the nation at large as involvement of these people in business contributes to the national development. The findings also indicates that majority of respondents were married individuals. This implies that married individuals are likely to engage in business to fulfill the needs of their family than do single individuals.

On the other hand, the findings have proven that Pos*itive* Valence WOM has a positive and significant effect on brand loyalty. This implies that when mobile money customers are more exposed to positive valence WOM recommendations, the more they become royal to these brands. In other words, positive WOM recommendations build the loyalty of customers towards mobile money brands. This may be because customers have more trust on other customers who have more experience with the particular brand. Hanaysha (2016) posits that, when customers receive positive recommendation about a brand from their fellow customers, they gain more confidence towards that particular brand which leads to positive repurchase intentions. WOM recommendation is regarded as a significant source of information that influences human

behavior (Filieri, Raguseo, & Vitari, 2018; Nam, Baker, Ahmad & Goo, 2018) and significantly affects the way customers make purchase decisions (Lin, Featherman, Brooks & Hajli, 2018). In a similar vein, Ngoma and Ntale (2019) concluded that when customers speak positively concerning a firm and its services/products, then customers are likely to be loyal to that firm. However, Kim and Hyun (2019) contradicts this view by pointing out that WOM recommendations does not have effect on brand loyalty.

However, Negative Valence WOM recommendations negatively impacted the loyalty of customers. That is, the more customers were exposed to negative words regarding a particular mobile money brand, those customers tended to be disloyal to that brand. This connotes that MMOs should impart customers with a positive experience and avoid things that arouse negative WOM recommendations from customers. This is because customers talk negatively and even deter others from mobile brands based on their past experiences (Ngoma & Ntale, 2019).

Moreover, the findings also revealed that WOM content had a positive and significant effect on brand loyalty. This suggests that the increase in WOM content raises the desire of customers to be loyal to the studied mobile money service brands. This implies that for MMOs to be successful and establish a larger customer base, they should offer services that will foster WOM content.

Furthermore, the findings also indicate that WOM intensity has a positive and significant effect on brand loyalty. This implies that the increase in WOM intensity also increases the desire of customers to be loyal towards the mobile money brands. In other words, this connotes that for MMOs to be successful and establish a larger customer base, they should offer services that will foster WOM content from their mobile money services.

Nevertheless, the findings of this study confirm the theory of social exchange by Blau (1964) that is based on the principle of generalized reciprocity. The theory posits that individuals have a set of reciprocity relationships which makes them feel obligated to pay back the benefits they get from their colleagues. For this study, the results connote that customers using a certain mobile money service brand when gives positive WOM recommendation to another existing or potential customer, that customer will also become loyal to that brand as a reciprocity reaction to their relationships.

Besides, if MMOs wants to strategically differentiate themselves from competitors through loyal customers, they should give more emphasis on positive valence WOM, WOM content, and WOM intensity. However, it should be noted that Positive Valence WOM is more influential followed by WOM intensity and lastly WOM content. Hence MMOs should pay more attention to generating Positive Valence WOM dimension if they want to effectively utilize WOM recommendation as a marketing tool.

Unlike previous studies, this paper has demonstrated empirically how WOM generates brand loyalty by giving more emphasis on the effect of individual WOM dimensions. This is a novel contribution to brand management literature because none of the studies have taken into account

the effect of individual WOM dimensions on brand loyalty.

This study also offers empirical validation for the eWOM scale by Goyette et al., (2010) to offline customers in the Tanzanian mobile money industry. This scale has 9 items in which the three factors have two items and the fourth one has three items. However, the review of the literature indicates that the concept of the number of scale items per factor has generated inconsistent and debatable conclusions. One group of scholars assert that each factor should have at least 3 items per factor to be well explained, ensure high reliability and identification (Hair et al., 2010) while the other group of researchers posits that two items per factor are enough for analysis (Goyette et al., 2010; Yong & Pearce, 2013). Other scholars have moved one step ahead by pointing out that even a single item factor is sufficient for factor analysis (Bergkvist & Rossiter 2007; Bergkvist & Rossiter 2009; Petrescu, 2013). The findings from the current study revealed that two items per factor are also sufficient for factor analysis. Therefore, this study disapproves the concept that two items are not adequate for factor analysis and thereby adding knowledge to the brand management literature regarding the minimum scale items for each factor.

Nevertheless, this study provides managerial solutions to MMOs on how to generate loyalty of customers towards brands. The study establishes that to build the loyalty of customers, MMOs should pay attention to marketing strategies that lead to Positive Valence WOM recommendations, WOM intensity and WOM content. However, more emphasis should be on Positive Valence WOM as it has a great impact on building the loyalty of customers towards mobile money brands than other WOM dimensions. Customers who are triggered by getting information from their fellows who are customers of a particular brand consider such a brand worth paying more for, sharing the brand with friends, and returning for the service.

Conclusion and Recommendations

This paper aimed at finding the effect of WOM dimensions on brand loyalty. The findings from this study indicate that Positive Valence, WOM intensity and WOM content positively and significantly influence brand loyalty in the mobile money service industry. Therefore, it is concluded that the WOM dimensions are predictors of brand loyalty except for the Negative Valence WOM which had a negative impact on brand loyalty. It is recommended that MMOs should give more emphasis on creating Positive Valence WOM if they are to greatly benefit from WOM recommendation which is less cost full but more powerfully marketing tool than any other marketing tool.

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References

Almossawi, M. M. (2015). The impact of word of mouth on the bank selection decision of the youth: A case of Bahrain. *International Journal of Business and Management, 10*(4), 123 -135.

Al-Msallam, S. (2015). Customer satisfaction and brand loyalty in the hotel industry. *European Scientific Journal*, *1*, 232 -251.

Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of Service Research*. *1*(1), 5 - 17.

Andreia, A. G. (2012). A word-of-mouse approach for word-of-mouth measurement. *The USV Annals of Economics and Public Administration*, *12*(2), 87 - 93.

Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academic Marketing Science*, *40,* 8–34.

Balakrishnan, B. K. D. P, Dahnil, M. I., & Yi, W. J. (2014). The impact of social media marketing medium toward purchase intention and brand loyalty among generation Y. *Social and Behavioral Sciences, 148*, 177-185.

Bansal, H. S., & Voyer, P. A. (2000). Word-of-mouth processes within a service purchase decision context. *Journal of Service Research, 2*(3), 166 -177.

Barreda, A. A., Bilgihan, A., Nusair, K., & Okumus, F. (2015). Generating brand awareness in online social networks. *Computers in Human Behavior, 50,* 600–609.

Bergkvist, L., & Rossiter, J. R. (2007). The predictive validity of multiple-item versus single-item measures of the same constructs. *Journal of Marketing Research*, *44* (2), 175-184.

Bergkvist, L., & Rossiter, J. R. (2009). Tailor-made single-item measures of doubly concrete constructs. *International Journal of Advertising, 28(4), 607– 621.*

Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley

Bone, P. F. (1992). Determinants of word-of-mouth communications during product consumption. *Advances in Consumer Research, 19*, 579 - 583.

BOT, (2015). *Directorate of banking supervision annual report. Retrieved from* http://www.bot.go.tz/BankingSupervision/Reports/DBS%20 ANNUAL%20REPOR%202015%20Final%20DRAFT%2010%20OCT%2016.pdf.

Buttle, F. A. (1998). Word of mouth: Understanding and managing referral marketing. *Journal of Strategic Marketing*, *6*, 241 - 254.

Chin, W. W. (1998). *The partial least squares approach to structural equation modeling. In: Modern methods for business research,* NJ: Lawrence Erlbaum Associates.

Day, G. S. (1971). Attitude change, media and word of mouth. *Journal of Advertising Research, 11*(6), 31 – 40.

DeSimone, J. A., Harms, P. D., & DeSimone, A. J. (2015). Best practice recommendations for data screening. Retrieved from http://digitalcommons.unl.edu/managementfacpub/124

Dick, A., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, *22*(2), 99 -133.

Dowling, G.R. & Uncles, M.D. (1997). Do Customer Loyalty Schemes Really Work? *Sloan Management Review*, *38*(4), 71-82.

Eelen, J., Özturan, P., & Verlegh, P. W. J. (2017). The differential impact of brand loyalty on traditional and online word of mouth: The moderating roles of self-brand connection and

the desire to help the brand. *International Journal of Research in Marketing*, *34*(4), 872–891.

Field, A. (2009). *Discovering statistics using SPSS,* (3rd ed.) New Delhi: SAGE publication.

Filieri, R., Raguseo, E., & Vitari, C. (2018). When are extreme ratings more helpful? Empirical evidence on the moderating effects of review characteristics and product type. *Computers in Human Behavior, 88*, 134–142.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50.

Gilly, M. C., Graham, J. L., Wolfinbarger, M. F., & Yale, L. J. (1998). A dyadic study of interpersonal information search. *Journal of the Academy of Marketing Science, 26*(2), 83−100.

Goyette, I., Richard, L., Bergeron, J., & Marticotte, F. (2010). e-WOM scale: Word-of-mouth measurement scale for e-services context. *Canadian Journal of Administrative Sciences, 27*(1), 5-23.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.) Upper Saddle River, NJ: Prentice-Hall.

Hanaysha, J. (2016). Examining the link between word of mouth and brand equity: A study on international fast-food restaurants in Malaysia. *Asian Economic and Social Society. 6*(3), 41-49.

Harrison-Walker, L. J. (2001). The measurement of Word-of-Mouth communication and an investigation of service quality and customer commitment as potential antecedents. *Journal of Service Research, 4*(1), 60 – 75.

Homans, G. C. (1958). Social behaviour and exchange. *American Journal of Sociology,* 6*3,* 597–606.

Hox, J. J., & Bechger, T. M. (1998). An introduction to structural equation modeling. *Family Science Review, 11*(2), 354 - 373.

Jones, T., & Taylor, F.S. (2007). The conceptual domain of service loyalty: How many dimensions? *Journal of Service Marketing, 21*(1), 36 - 51.

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20,* 141 – 151.

Kass, R. A., & Tinsley, H. E. A. (1979). Factor analysis. *Journal of Leisure Research, 11,* 120 –138.

Kim, H. L., & Hyun, S. S. (2019). The Relationships among Perceived Value, Intention to Use Hashtags, eWOM, and Brand Loyalty of Air Travelers. *Sustainability, 11*(6523), 1 – 12.

Kim, W. G., Han, J. S., & Lee, E. (2001). Effects of relationship marketing on repeat purchase and Word of Mouth. *Journal of Hospitality and Tourism Research, 25*(3), 272 – 288.

Kline, R. B. (2011). *Principles and practice of structural equation modeling,* New York, NY: The Guilford Press.

Kuenzel, S., & Halliday, S. V. (2008). Investing antecedents and consequences of brand identification. *Journal of Product and Brand Management, 17*(5), 293 - 304.

Kumar, A. (2016). Word-of-Mouth communication drivers and moderators shaping consumer behaviour: A review and directions for future research. *International Journal of Recent Advances in Engineering and Technology*, *41*(1), 42 - 47.

Kumar, S. (2015). Structural equation modeling basic assumptions and concepts: A novices

guide. *Asian Journal of Management Sciences*, *3*(7), 25 - 28.

Lin, X., Featherman, M., Brooks, S. L., & Hajli, N. (2018). Exploring gender differences in online consumer purchase decision making: an online product presentation perspective. Information Systems Frontiers, 1–15.

Magatef, S. G., & Tomalieh, E. F. (2015). The Impact of Customer Loyalty Programs on Customer Retention. *International Journal of Business and Social Science*, *6*(8), 78 -93.

Mahalanobis, P. C. (1936). On the generalized distance in statistics. *Proceedings of the national institute of sciences, India, 2*(1), 49 – 55.

Maisam, S., & Mahsa, R. I. (2016). Positive Word of Mouth Marketing: Explaining the Roles of Value Congruity and Brand Love. *Journal of Competitiveness*, *8*(1), 19 – 37.

Matonya, J., Jaensson, J., & Ngaruko, D. (2019). Influence of Brand Experience on Brand Loyalty: Evidence from Mobile Money Services in Tanzania. *The Pan-African Journal of Business Management, 3*(2), 55 – 70.

Momeni, A., & Akhavanfar, A. (2015). Review Article: Brand Experience, Brand Loyalty, Satisfaction and Brand Trust. *International Research Journal of Management Sciences*, *3*(3), 84-87.

Nam, K., Baker, J., Ahmad, N., & Goo, J. (2018). Dissatisfaction, disconfirmation, and distrust: An empirical examination of value codestruction through negative electronic word-of-mouth (Ewom). *Information Systems Frontiers*, 1–18.

Ndesangia, N. A. (2015). *Analyzing the factors influencing brand loyalty among mobile phone users in Tanzania: A case study of Muhimbili national hospital* (Masters Dissertation, The Open University of Tanzania, Dar es Salam, Tanzania). Retrieved from http://196.216.247.5/cgi-bin/koha/opac-detail.pl?biblionumber=4351

Ngoma, M., & Ntale, P.D. (2019). Word of mouth communication: A mediator of relationship marketing and customer loyalty, *Cogent Business and Management*, *6*, 1 -20.

Nikhashemi, S. R., Paim, L. H., & Khatibi, A. (2015). The role of brand loyalty in generating positive word of mouth among Malaysian hypermarket customers. World Academy of Science, Engineering and Technology *International Journal of Economics and Management Engineering*, *9*(5), 1647 – 1652.

Niyomsart, S., & Khamwon, A. (2016). Brand love, brand loyalty and word of mouth: A case of Air Asia. *Conference of the International Journal of Arts and Science*, *9*(1), 263 – 268.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.) Sydney, Australia: McGraw Hill.

Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, *63*, 33–44.

Ong, C. H., Lee, H. W., & Ramayah, T. (2018). *Impact of brand experience on loyalty. Journal of Hospitality Marketing and Management, 27(7), 755–774.*

Pan, Y., Sheng, S., & Xie, F. T. (2012). Antecedents of customer loyalty: An empirical synthesis and reexamination. *Journal of Retailing and Consumer Services*, *19*, 150–158.

Praharjo, A., & Kusumawati, A. (2016). The impact of electronic word of mouth on repurchase intention mediated by brand loyalty and perceived risk. *South East Asia Journal of Contemporary Business, Economics and Law, 11*(2), 62 - 69.

Petrescu, M. (2013). Marketing research using single-item indicators in structural equation models. *Journal of Marketing Analytics*, *1*(2), 99–117.

Rahayu, J. (2018). Impact of Service Quality, Customer Satisfaction and Word of Mouth on Loyalty. *Journal of International Business and Economics, 6*(1), 7-11.

Rakić, B., & Rakić, M. (2018). *From word of mouth marketing to word of mouth in the traditional and digital media*. Paper presented at the Third *International Scientific Conference, Vrnjacka, Banja, Serbia. Retrieved from* https://www.researchgate.net/publication/333976780_From_word_of_mouth_marketing_to_word_of_mouth_in_the_traditional_and_digital_media

Russell-Bennett, R., McColl-Kennedy, J. R., & Coote, L.V. (2007). The relative importance of perceived risk, involvement and satisfaction on brand loyalty in a business services setting. *Journal of Business Research, 60*(12), 1253 - 1260.

Semadi, Y. P. and Ariyanti, M. (2018). The influence of brand experience, brand image, and brand trust on brand loyalty of ABC-CASH. *Asian Journal of Management Sciences and Education, 7*(3), 12 -23.

Sheth, J. (1968). A factor analytical model of brand loyalty. *Journal of Marketing Research, 5*(4), 395 - 404.

Shin, S. K. S., Amenuvor, F. E., Basilisco, R., & Owusu-Antwi, K. (2019). Brand Trust and Brand Loyalty: A Moderation and Mediation Perspective. *Current Journal of Applied Science and Technology 38*(4), 1-17.

Silverman, G. (2011). *The secrets of word-of-mouth marketing how to trigger exponential sales through run away word of mouth*, New York: AMACOM.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics (*6th ed.). London: Pearson Education.

Taghizadeh, H., Taghipourian, M. J., & Kazhae, A. (2013). The effect of customer satisfaction on word of mouth communication. *Research Journal of Applied Sciences, Engineering and Technology, 5*(8), 2569 – 2575.

Wong, M. M., Kwok, M. J., & Lau, M. M. (2015). Spreading good words: The mediating effect of brand loyalty between role model influence and word of mouth. *Contemporary Management Research, 11*(4), 313 - 326.

Worthington, S., Russell-Bennett, R., & Hartel, C. E. J. (2009). A tridimensional approach for auditing brand loyalty. *Journal of Brand Management, 17*(4), 243 – 253.

Yehia, S. M. Z., & Massimo, C. (2016). *An experiment on brand loyalty among mobile phone users in the Basque region of Spain.* Retrieved from http://mmi.fem.sumdu.edu.ua/sites/default/files/mmi2016_1_ 32_47.pdf

Yong, A. G., & Pearce, S. (2013). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology, 9*(2), 79-94.

Zhang, S., Peng, M. Y., Peng, Y., Zhang, Y., Ren, G, & Chen, C. (2020). Expressive brand relationship, brand love, and brand loyalty for tablet pcs: Building a sustainable brand. The Frontiers in Psychology, *11*(231), 1 – 10.

APPENDIX 1: Exploratory Factor Analysis Output of Retained Items for Word of Mouth and Brand loyalty

Word of mouth construct	Item	Description of the items description	Factor Loadings (Pattern Matrix)
WOM intensity	WIN2	I spoke of this brand company much more frequently than about any other type of product or service	.913
	WIN1	I spoke of this brand much more frequently than about any other brand	.849
	WIN3		.763
WOM positive valence	PV2	I have spoken favourably of this brand to others	.651
	PV1	I am proud to say to others that I am a customer of this brand	.623
WOM content	WC2	I discuss the quality of the services offered to others	.889
	WC1	I discuss the variety of services offered to others	.872
WOM negative valence	NV2	I have spoken unfavourably of this brand to others	,799
	NV1	I mostly say negative things about this brand to others	.761
Brand Loyalty Construct			
	BL1	I encourage friends and relatives to do business with this brand	.627
	BL2	I will speak positively about my mobile money brand	.763
	BL3	I recommend this brand to someone who asks my advice	.790
	BL4	I would like to switch to another mobile money operator that offer better services	.795
	BL5	When I last used mobile money services, this brand was my first choice	.790
	BL6	I would like to switch to another mobile money operator that offer more services	.660
	BL7	Price is not an important factor in my decision to remain with this brand	.615
	BL8	I am very interested in what others think about my mobile money brand	.761

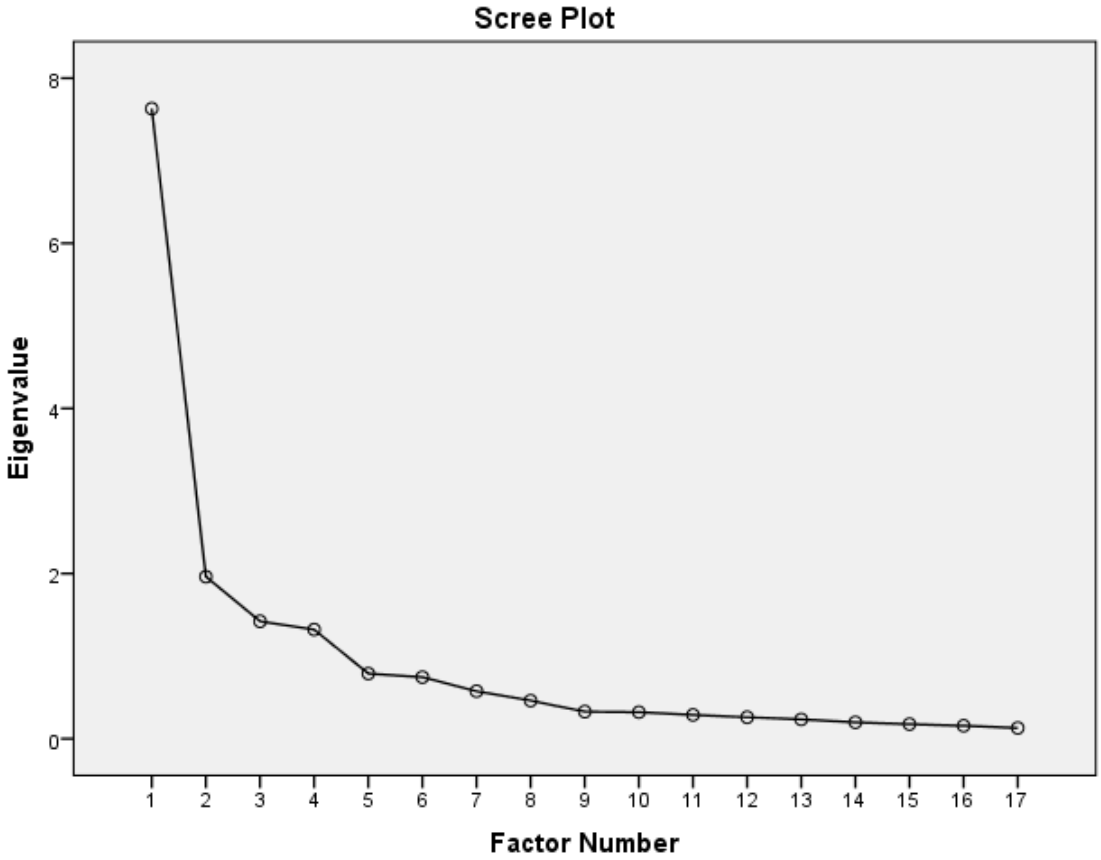
Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

APPENDIX 2: Eigen Values – Total Variance Explained

Factor	Initial Eigenvalues			Rotation sums of square loadings
	Total	**% of Variance**	**Cumulative %**	**Total**
1	7.631	44.887	44.887	6.148
2	1.963	11.544	56.431	4.079
3	1.422	8.363	64.794	3.195
4	1.322	7.774	**72.567**	4.479
5	.789	4.642	77.210	
6	.745	4.385	81.595	
7	.575	3.381	84.975	
8	.462	2.715	87.690	
9	.328	1.928	89.618	
10	.321	1.887	91.505	
11	.288	1.695	93.200	
12	.260	1.527	94.727	
13	.235	1.380	96.107	
14	.199	1.171	97.278	
15	.176	1.038	98.316	
16	.156	.920	99.235	
17	.130	.765	100.000	

Extraction Method: Principal Axis Factoring

APPENDIX 3: Scree plot



The Influence of Training Participation on Employee Performance and Employee Intention to Leave Manufacturing Firms in sub-Saharan Africa: A study of Ghana

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Abstract: *The purpose of this paper is to investigate how training participation influences both employee performance and employee intention to turnover in manufacturing firms in sub-Saharan Africa (SSA). Using a cross-sectional survey of a multinational manufacturing firm in Ghana through structural equation modelling and regression analysis, we tested two asymmetrical hypotheses of employee training participation leading to outcomes of employee performance and employee intention to turnover. Findings showed that employee performance is positively related to training participation in the manufacturing sector. Also, the findings demonstrated that training participation in the manufacturing sector is positively related to employee intention to leave their firms. These findings explain the effect of valence and human motivation to the needs of training participation and outcome. An investigation of training participation and employee performance with intention to leave or turnover are rarely assessed at the same time; specifically, training participation in manufacturing firms in SSA. Thus, manufacturing firms must be aware that different motivation and expectations of training participation are hunted for by employees as they are engaged in training organized by their respective firms.*

Keywords: Training participation, Employee performance, Intention to Leave, valence-instrumentality, Sub-Saharan Africa.

Introduction

Different dimensions of training have been found to influence employees' reaction to their organization (Dermol and Čater, 2013; Ibrahim et al., 2017*;* Kampkotter and Marggraf, 2015). Arguably, when employees participate in organizational training, they contribute positively in terms of performance to their various organizations (Abugre and Adebola, 2015; Armstrong, 2009). Thus, it appears training participation keeps employees current on their job functions to learn new skills which can improve their satisfaction with the firm thereby enhancing their retention rate.

Employee training participation refers to workers involvement in a range of formalized programs which would enable them to perform on their current job efficiently (Evans and Davis, 2005). Additionally, it entails the systematic and planned instruction and development activities to promote learning among employees (Armstrong, 2009). As a result, training participation in firms can either be general or specific. Training participation is described as general when it offers employees with a broad horizon of knowledge for the general labour market. On the other hand, training participation is described as specific when firm specific training is offered to employees to improve their knowledge on specific skills and abilities pertaining to a unique industry (Benson, 2006). Consequently, the primary goal of any training program is to impart on employees a new set of knowledge, skills, ability and behavior, or attitude (Dessler, 2006; DeNisi and Griffin, 2005). Hence, the survival of any firm in this competitive world lies in its ability to train its human resource to be creative and innovative, and who will invariably enhance performance and increase the firm's competitive advantage (Chukwu, 2016; Dermol and Čater, 2013).

Though training participation is an active means that enables individual employees to make use of their capabilities and potentials, it is argued that as training increases the value of employees, it also increases the likelihood of their being pursued by rival companies (Green, 2000; Benson, Finegold and Mohrman, 2004). Thus, the authors suggest that companies that train their employees extensively may end up generating higher turnover of employees. The reason is that, the trained personnel leave the company for better paid jobs where they can use the skills they have acquired as a leverage. Therefore, one of the most commonly cited reasons why some organizations under invest in training is the risk of employee turnover (Brum, 2007). However, there is no consensus in the literature about the connection between turnover and investment in training that leads to performance (Nguyen et al., 2010). Turnover and performance at the individual and organizational levels are closely interrelated. For that reason, a firm should consider how it predicts a training and development program that can affect an employee's effort in terms of performance as well as the employee's intension to leave the organization. Similarly, a firm should anticipate how the cost of training employees can affect how much they (employees) contribute to the organization, and how often they leave for other firms in contrast with untrained employees (Fallon and Rice, 2015). This is particular so as most organizations in Sub-Saharan Africa (SSA) are confronted with the dilemmas of employee performance and employee turnover resulting from training participation. Despite these significant developments, our knowledge of how training participation impacts employees' performance and their intentions to leave has been overlooked by scholars. Hence, the significance of this work.

Accordingly, the present study has two aims. The first aim is to examine how training participation can influence the performance of trained workers. The second aim is to evaluate the contention that training participation would lead to employee intention to leave and consequently turnover. By these objectives, this work makes three major contribution to human resource development. First, this work aims to validate the theoretical link between training participation and employee performance leading to institutional performance. Thus, we argue that

manufacturing firms in Africa can be globally competitive by taking the responsibility of the growth prospects of their employees through training and career growth initiatives.

Second, we contribute to the valence-instrumentality expectancy approach to human resource development. By this, we suggest the significance of identifying, and strengthening the factors responsible for attracting and retaining talent in manufacturing firms in Africa. The key elements of employment brand within the manufacturing firms are the company's performance track record, its growth prospects, working culture and reputation in the public eye. Thus, the emotional orientations of employees toward outcomes could lead to satisfaction to stay or dissatisfaction to leave.

Third, we develop insight that advances theory in the training and development field of HRM. By this, we provide evidence on the controversy that training participation would not necessarily retain employees but would also empower employees to leave the firm which is useful for the science of training human resource development (HRD) in organizations in Africa.

Conceptual Model and Rationale for Training Participation

According to Campbell (1989), there is a renewed interest in the influence of trainee motivation on training effectiveness. Therefore, researchers must endeavour to offer a greater attention to issues such as individual and situational influences on trainees' motivation and trainees' cognitions regarding the significance of organizational training and the desired outcomes. According to Vroom (1964), the valence-instrumentality-expectancy theory framework concerns the affective orientations of individuals toward outcomes, and this can be interpreted as the consequences or anticipated satisfaction of the individual to the outcome. For example, training participation as a HR process can influence an employee's affective orientation towards performance (Abugre and Adebola, 2015; Ibrahim et al., 2017; Úbeda-García et al., 2014) as well as turnover (Bambacas and Kulik, 2013; Kampkotter and Marggraf, 2015; Park et al., 2015). Consequently, several writers have suggested that a valence-instrumentality-expectancy approach should prove useful for studying training motivation (Williams et al., 1991; Mathieu et al., 1992). The reason is that employees are motivated to participate in training for various reasons. As some may be motivated to be trained as a result of enhancing their performance and thereby contributing to organizational outcome (Grober et al., 2002), others may be motivated to build their careers (Bloisi, 2007; Fallon and Rice, 2015) leading to their employability elsewhere (Cappelli, 1999; Cheng and Waldenberger, 2013; Fallon and Rice, 2015). Therefore, training participation is capable of enhancing worker performance in the workplace, and at the same time capable of activating worker intention to leave the organization for market reasons.

In the current study, we assess the influence of training participation on employee performance and turnover as individuals can either be motivated to increase their performance whilst working or to leave the organization for better conditions elsewhere. Employees behaviors and motives are determined by their individual motivational forces and actions which are a function of three distinct perceptions: valence, expectancy, and instrumentality (Vroom, 1964). First, valence explains the importance employees would attach to a particular reward, for example, the degree

of an anticipated reward after receiving or participating in training. Second, expectancy describes how employees' beliefs are shaped by the effort that leads to performance. For example, upon receiving training, their energy to perform increases either within or without. Lastly, instrumentality explains employees' belief that performance is related to rewards, for example, when employees perform in work organizations, they expect to receive some rewards. The absence of these rewards may lead to turnover while the acquisition of these rewards may lead to performance. Consequently, the valence-instrumentality–expectancy theory describes how individual motivational forces can direct employees' specific behavioral alternatives, in deciding behavior options for a course of action taken. Thus, the valence-instrumentality-expectancy approach which describes individual's affective orientation to outcomes is employed to understand the interlinking rationale of training participation as a causal variable to employee performance on one hand, and employee intention to turnover on the other.

Training Participation in Organizations

Given the rising competitive nature of manufacturing firms in developing economies, and the increasing demand for skills-based training and employee competencies, training participation and skills-based training programs have become significant for firms in Africa (Abugre and Adebola, 2015). However, many firms face the challenge of how best to encourage participation in training and learning activities, given their apparent benefits to their employees' work performance and long-term career advancement (Bednall et al., 2014), and which may also result in their intention to leave for greener pastures elsewhere (Bambacas and Kulik, 2013). The concept of training participation has been described and applied variously by numerous researchers and scholars (Armstrong, 2009; Khanfar, 2011; Rahman and Nas, 2013; Rao, 2011). For example, Evans and Davis (2005) argue that training participation can be seen as the involvement of employees in the extensiveness of formalized programs to develop knowledge, skills and abilities. Similarly, Dessler (2006) views training participation as a process of equipping workers with the necessary skills, knowledge, and capabilities required for proper performance of tasks or achievement of corporate goals. Armstrong (2009) added that training participation is the process of empowering workers with skills, knowledge, and abilities to build firm or organizational capabilities and to enhance corporate effectiveness and efficiency. It is regarded as the deliberate efforts that companies make to engage their workers to learn the needed job-related knowledge, skills and behaviors (DeNisi and Griffin, 2005). Accordingly, Khanfar (2011) is of the view that training participation and development of employees is a significant way of enabling individual workers to utilize their skills and abilities acquired to improve performance in organizations. Generally, two main types of training participation constitute training in firms: employees' participation in general organizational training, and employees' participation in organizational / firm-specific training.

General and Specific Training in Organizations

In his seminal commentary on investment in human capital, Becker (1962) made a distinction between employees' participation in general training and employees' participation in specific training as products of organizational human capital investment. In fact, Becker (1962) defined

general training as training or organizational human capital investment that increases a worker's productivity for not only the firm that provided the training, but for other employers too. Similarly, he defined specific training as a human capital investment that increases productivity only for the employer who provided the training. In later years, Becker (1993) offered further explanation that general organizational training is a training that is offered to employees with the aim of raising their ability to improve their overall performance not only in their current organizations, but also for their future use with other organizations in the general labor market. Examples of such training participation include apprenticeship training, computer training and college-based courses. Therefore, an organization that offers general training need to pay remunerations that are "commensurate with an employee's new level of productivity and skills acquired or risk losing the employee to other organizations" as it potentially increases their turnover intentions (Brum, 2007, p. 5). On the other hand, firm-specific or simply specific organizational training is training that seeks to improve the ability, skills and knowledge of employees in order to enhance their performance only in the present organization that sponsors the training for them (Benson, 2006). Other empirical works from the human capital and training literature have endeavoured to proxy for general versus specific training by linking them to the different effects of on-the-job versus off-the-job training (Lynch 1991), or by linking them to the different effects of firm versus college/classroom training (Loewenstein and Spletzer 1997). Accordingly, Lynch (1991) argued that employees who participate in on-the-job training are less likely to quit their current organization, while employees who participate in off-the- job training are more likely to leave their current employer. Likewise, Loewenstein and Spletzer (1997) claimed that employees who participate in company training are less likely to leave their job, whereas employees who participate in college training have the mobility patterns comparable to those with no training. Consequently, Loewenstein and Spletzer (1999) stressed that on-the-job and company training participation offer a more specific training than off-the-job and college training participation which give a more general training that motivate job mobility.

Whether general or specific training, a major challenge of employee training participation research is to understand the factors that increase the prospects of sustained performance at the workplace. Thus, the focus of this study is to investigate training participation of employees and how this training participation affects employees' performance and, also their intentions to leave.

Training Participation and Employee Performance

The issue of training participation and performance has gained significant research attention among scholars (Abugre and Adebola, 2015; Ibrahim et al., 2017; Úbeda-García et al., 2014). In a qualitative research which focuses on mechanics in Northern India, Barber (2004) found that on-the-job training leads to more innovation and tacit skills of workers. Equally, Shah et al. (2014) assessed the influence of on-the-job training on employee performance in microfinance banks at Khairpur-India. In their findings, they concluded that training is vital for enhancing the effectiveness of workers. Additionally, while the preceding studies concentrated on training methodology (Ibrahim et al., 2017), training methods or strategies (Abbas and Yaqoob, 2009), some scholars have examined how training quality (Dermol and Čater, 2013), training policy

(Úbeda-García et al., 2014) and employee training participation and development planning (Wise, 2014) can impact performance.

These prior studies suggest that there are positive outcomes of training participation of employees. They suggest that training outcomes can make training beneficiaries perform more efficiently and effectively. It is, however, important to recognise that while training and employee performance have been examined in various sectors, manufacturing sector employees have not received significant attention as evident in the above reviews or studies, particularly in Ghana. In line with the above, we hypothesized that:

H1: *Training participation positively predicts employee performance in manufacturing firms in sub-Saharan Africa.*

Training Participation and Employee Intention to Leave

Organizational training participation is believed to be a major determinant of employees' intention to leave. This is because; training can motivate employees' intention to leave their organizations for better jobs elsewhere or motivate them to stay and perform their duties. As beneficiaries of training may be motivated to reciprocate their organizations' investment by increasing their work output, some employees may tend to increase their intentions to leave and work for perceived better or well-endowed firms due to increase in new skills. Consequently, various writers (Ghosh and Reio, 2013; Kampkotter and Marggraf, 2015; Kraimer et al., 2011; Rahman and Nas, 2013) have examined the effect training participation can have on employees' intension to leave or stay. Some found that training participation significantly reduces employees' intention to leave (Newman et al., 2011; Park et al., 2015; Ghosh and Reio, 2013) while others (Bambacas and Kulik, 2013; Cheng and Waldenberger, 2013; Fallon and Rice, 2015) indicated that training participation encourages employees to leave their present organizations for better organizations.

Hence, it is obvious that training participation can play significant roles in reducing as well as increasing turnover intentions among workers. For training participation to engender employee intension to leave, it is argued that general employee training produces experiences as well as expertise that are equally important or relevant to other companies. This therefore leads to increased intention to leave among trained workers. This is because these trained workers can become easy target for companies to poach (Cheng and Waldenberger, 2013; Green et al., 2000; Sieben, 2007; Benson et al, 2004). Consistent with this finding, Pedler et al. (1991) and Senge (1990) argued that companies that organize effective training for their workers create more turnover intention among their workers. They explain that trained workers quit their companies or institutions for better paid jobs. They also leave to work for firms where they will be allowed to utilize the skills or the knowledge they have acquired. Pedler et al. (1991) and Senge (1990) further maintained that training participation and development programs improve the value of the workers. It also enhances their career growth, and this increases the probability of their being "poached" by competitor firms.

Moreover, training and development of employees help them to become accustomed to the current methods of doing a particular work resulting from the new expertise, knowledge and abilities gained from the training. This allows them to become more employable in other organizations (Fallon and Rice, 2015; Pedler et al., 1991; Senge, 1990). In line with this, Smith (2010) supported Seibert and Kraimer (2001) and suggest some reasons why training may generate more turnover intention among employees. According to them, people may take part in training with the motive of getting opportunities to network with colleagues and significant others. These new contacts may in turn open doors for job transitions. Similarly, training participation can engender intention to leave among employees when they feel that career opportunities in their institution are poorly matched with their career aspirations (Benson et al., 2004; Kraimer et al., 2011). This consequently can motivate them to trade off their organizations' opportunities for those in rival organizations.

The foregoing discussions clearly demonstrates that in spite of the widely held notion that firms can promote retention of their workers through training participation initiatives, training has also a dark side, that is; it can facilitate the development of workers' intention to leave the firms that sponsored or invested in their trainings and development. Consequently, we hypothesize that:

H2: *Training participation positively predicts employees' intention to leave in manufacturing firms in sub-Saharan Africa.*

Research Methodology and Design

This study sought to investigate the effect of training participation on employees' performance and, their turnover intensions in a large manufacturing company in Ghana. To achieve the purpose of this research, we adopted a cross-sectional survey design in the form of a quantitative methodology. The population of interest for this study is defined as all employees of the automotive manufacturing firm under study who have benefited or participated in previous training programmes in the current organization. The choice of the automotive industry is because the automotive industry is currently being affected by constant technological advancement which have heightened industry competition globally. Consequently, it is expected that most of the stakeholders in the industry will invest in their employees by way of training them regularly to build their capacity in new technologies in order to meet the changing needs of customers. Similarly, there appear to be a large number of workers in the manufacturing sector fleeing to developed economies for greener pastures after some years of training. Hence, our motivation to investigate a firm in the manufacturing industry using the current firm.

Sampling Procedure and Data collection

We initially obtained ethics approval to conduct this study. After obtaining the ethics approval, we contacted the HR Manager of the manufacturing firm based in Accra -the capital city of Ghana to explain the nature of the study. After a face-to-face meeting with the HR manager, he

gave approval to conduct the study. We then approached the workers in the firm to inform them about our research having gotten permission and support from the HR manager.

The company has a total of 125 employees but to be included in the study, an employee should have been a full-time worker and, also participated in at least a training session after joining the firm. Accordingly, the most conveniently available employee who is a full-time worker and who has participated in at least a training programme before was sampled for this study. Hence, one hundred (100) survey questionnaires in hard copies were personally distributed to the willing participants. Contacts of volunteered participants were taken by the researchers to be able to trace them for the completed questionnaires if they did not want to personally drop or hand them over to the HR manager who promised to collect them for us. We encouraged voluntary participation of the respondents, and ensured that the respondents' rights to be informed, right to privacy and right to choose are respected by maintaining confidentiality of all the information they gave to aid this study. Accordingly, all ethical protocols regarding the data collection were observed and utilized.

The entire process of data collection lasted for about one and half months when the final batch of completed questionnaires was collected. Thus, a simple random procedure to obtain as many respondents as possible yielded a total of 89 respondents. The demographic characteristics of the research participants are presented in Table 1 below.

Table 1. Demographic Characteristics of the Research Participants

Demographic Characteristics		**Frequency**	**Percentage**
Gender:	Male	52	58.43
	Female	37	41.57
Age:	20 years or less	5	5.62
	21 -40 years	66	74.16
	41 – 60 years	18	20.22
Education:	Senior High/Secondary	41	46.07
	Diploma	27	30.34
	Higher National Diploma	8	8.98
	Bachelor Degree	11	12.36
	Master Degree	2	2.25
Organizational Tenure: 1 -5 years		15	16.85
	6 – 10 years	22	24.72
	11 – 15 years	25	28.09
	16 years and more	27	30.34

Sample size = 89

Data Collection Instrument and Measurement

Data for this study was collected using a previously validated scale by other researchers. All items were measured using 5-point Likert scales. The instrument had four sections. The first part of the instrument dealt with participants' demographic details such as gender, age, level of education, and organizational tenure which were used as control variables.

The second part of the instrument dealt with employee performance using Podsakoff and MacKenzie's (1989) eight -item scale for job performance. These items were measured on a 5-point Likert scale with 1=strongly disagree to 5=strongly agree. It has a reliability value of 0.85. Sample items include *I feel successful on my job when I perform better than my colleagues; I accomplish something where others failed.*

The third part of the instrument measured training participation. The 14-item scale was adopted from Al-Alawiyat (2010). The items were measured on a 5-point Likert scale with 1=strongly disagree to 5=strongly agree. Sample items included: *Participating in training can give me new opportunities; Overall, the training I participated in meets my needs; my department provides training opportunities to meet the changing needs of the workplace.* Reliability value is 0. 80.
The final part which constituted the Intention to leave was measured with three item-scale developed by Babin and Boles (1998). The items were measured on a 5-point Likert scale with 1=strongly disagree to 5=strongly agree. A sample item from this scale is: *It is highly possible that I will be looking for a new job.* Reliability value is 0. 85.

Data Analysis and Results

The data was analysed using both confirmatory factor analysis (CFA) through structural equation modelling (SEM) and hierarchical regression analysis. First, the CFA is used to ascertain the validity and reliability of the measurement model and to determine each of the item construct fitness. Thus Table 2 shows all the items that were loaded successfully and their reliability scores (Cronbach alpha (α) coefficient, composite reliability (CR) scores, and average variance extracted (AVE) scores). Even though one of the three constructs had an AVE value below 0.50 the minimum threshold suggested by Fornell and Larcker (1981), in totality, the values support convergent validity of the constructs. Additionally, we adopted a discriminant validity analysis (see Table 3) to offset some of the moderately low values of the CFA indices by strengthening the validity and reliability of the construct measures.

Second, the use of hierarchical regression is to test the study hypotheses by assisting the researchers to determine the effect of training participation on employee performance and intention to leave while controlling for gender and organizational tenure in the regression model, since regression analysis is good at predicting the relationship between variables. The analysis was done with the aid of AMOS and SPSS software version 22.0.

Control variables

We used organizational tenure and gender of employees to control for employee training participation and their performance or intentions to leave. The two control variables were measured by duration (in years).

The results indicated that *both organizational tenure and gender of employees are not* associated with *employee performance* ($\beta = 0.066$, $p < 0.01$) and *Intentions to leave* ($\beta = 0.179$, $p < 0.01$). Thus, the results indicate that neither tenure nor gender of workers are likely to impact training participation on employee performance and their intentions to leave, all things being equal.

Table 2. Validity & Reliability of Confirmatory Factor Analysis with Cronbach's α for Study Measures

Variables	Loading	T- value
Employee Performance (α = 0.85, CR = 0.50, AVE = 0.50)		
EP4: I feel successful on my job when I perform better	0.464	
EP3: I accomplish something where others failed	0.689	1.999*
Training Participation (α = 80, CR = 0.69, AVE = 0.50)		
TP8: Role playing is key to training in this department	0.743	
TP7: Training participation gives me new opportunities.	0.835*	-2.723
TP5: Overall, the training I participate in meets my needs.	0.522	-1.866
TP3: My department provides training opportunities to meet the changing needs of the workplace.	0.073	0.315
Intention to Leave (α = 0.85, CR = 0.32, AVE = 0.29)		
IL2: It is highly possible I'll be looking for a new Job	0.755	
IL1: I frequently think of quitting this Job	0.563	0.820

Note: EP = *Employee Performance*, TP = *Training Participation*, IL = *Intention to Leave, α = Cronbach Alpha*, CR = *Composite Reliability and* AVE = *Average Variance Explained.*

***Discriminant Validity* Analysis**

It can be noted that AVE values are able to assess discriminant validity by simply comparing the square root of the AVE with the squared correlation between the construct items. Discriminant validity exists when the square root of AVE is greater than the squared construct correlations (Hair, Black, Babin, Anderson, and Tatham, 2010; Fornell and Larcker, 1981). As shown in Table 3, all the constructs in this study have demonstrated a good discriminant validity (bold figures). Below the figures are the goodness-of-fit indices for the measurement model or construct validity. The overall fitness of the measurement model (see figures italicized in Table 3) is validated by meeting the various threshold indices (Hu and Bentler, 1999).

Table 3. Fornell-Lacker Discriminant Validity Analysis & Fit Indices for the Measures

Variables	IL	OP	EP
IL	**0.54**		
TP	0.37	**0.62**	
EP	0.08	0.52	**0.56**

Goodness-of-fit Statistics of Measurement Model: *CMIN/Df = 0.875; GFI = 0.970; PCLOSE =0.741; CFI = 1.000; SRMR = 0.63; RMSEA = 0.000.*

Note: GFI= *Goodness of Fit Index;* CFI= *Comparative Fit Index;* SRMR= *Standard Root Mean Residual;* RMSEA=*Root Mean Square Error of Approximation.*

Table 4. Correlation of Training, Employee Performance and Intention to Leave

Measures	Mean	SD	1.	2.	3.	4	5
1. Employee Performance	3.72	0.51	1				
2. Intention to Leave	4.16	0.73	-0.11	1			
3. Training Participation	4.07	0.57	0.48**	0.40**	1		
4. Organizational Tenure	7.07	3.80	0.08	-0.05	0.08	1	
5. Gender	-	-	0.18	-0.00	0.28**	0.08	1

** p< .01

Equally, Table 4 shows the correlation matrix of employee performance, intention to leave, gender, organizational tenure and training participation. The internal correlations between the independent variables demonstrate low correlation figures signifying the absence of multicollinearity. Thus, our data shows a strong fit to test our study hypotheses.

Table 5. Hierarchical Regression Results Predicting Employee Performance and Intention to Leave from Training Participation

Measures	***Employee Performance***		***Intention to Leave***	
	Model (1)	Model (2)	Model (3)	Model (4)
Gender	0.179	0.052	0.003	-0.117
	(1.684)	(0.523)	(0.030)	(-1.142)
Organizational Tenure	0.066	0.038	-0.048	-0.075
	(0.626)	0.386)	(-0.447)	(-0.763)
Training Participation	-	0.464***	-	0.439***
	-	(4.690)	-	(4.285)
R^2	*0.038*	*0.236*	*0.002*	*0.180*
ΔR^2	-	*0.198*	-	*0.177*
F-test	*1.711*	*8.751****	*0.100*	*6.202****

****p<0.01* *Sample size (n) = 89* *t- values are in parenthesis*

Table 5 shows the results of the regression analysis. The first hypothesis sought to ascertain the impact of training participation on employee performance. The hierarchical regressions in Model (1) and Model (2) were performed to test this hypothesis. The results as shown in Model (2) demonstrates that training participation has a significant positive effect on employee performance ($\beta = 0.464$; $p < 0.001$). This means that the more employees received training the more their performance will improve. Also, the coefficient of determination (r-squared) showed that training participation accounts for 23.6% (i.e. $R^2 = 0.236$) variations in employee performance. In addition, the overall model is significant [$F = 8.751$; $df1 = 3$, $df2 = 85$, $p<0.001$].

The second hypothesis sought to determine the effect of training participation on intention to leave among workers. The hierarchical regression results in Model (3) and Model (4) were performed to test the second hypothesis. As shown in Model (4), training participation positively and significantly predict intention to leave ($\beta = 0.439$; $p < 0.001$). These results suggest that, the more workers are trained, the higher they nature their intentions to leave. Furthermore, the coefficient of determination (r-squared) implies that training participation contributes 18.0% (i.e. $R^2 = 0.180$) to intention to leave among workers. More so, the overall model is significant [$F = 6.202$; $df1 = 3$, $df2 = 85$; $p<0.001$].

Discussions of Findings

This study investigated the effect of training participation on employees' performance and their intention to leave. Analysis from the results reveal how training participation impacts on both employee performance and their intention to leave. This section discusses the meaning of these results in terms of our research hypotheses in relations to employees' performance and turnover implications of the study.

Does Training Participation Predict Employee Performance?

The first hypothesis (H_1) stated that, the effect of training participation will positively predict employee performance in manufacturing firms in Africa. Employee performance results from acquisition of both soft and hard skills essential for organizational performance, and it is an indicator of training participation of workers. Thus, our hypothesis was accepted suggesting that when employees participate in organizational training, their performance is enhanced resulting from the improved skills they acquired from the training. This means that training is a reactive factor that influences employees' ability to execute their organizational tasks positively. By this, both employees and the firm would benefit from the organized training which can be specific or general. Whilst employees would gain skills and new ways of doing a job task and thereby increasing their technical and operational skills, firms would benefit from the spill-over skills acquired by employees through the training programmes. Hence, the finding of this study is consistent with those of Úbeda-García et al. (2014) and Abugre and Adebola (2015). This means training participation, be it specific or general training reinforces the effectiveness of employees and triggers organizational or firm performance.

Does Training Participation Predict Turnover Intentions of Employees?

The second hypothesis (H_2) stated that training participation positively predicted employee's intention to leave. Individual intentions are linked to their behavioral intentions which are motivated by their affective orientations towards an outcome – known as the valence-instrumentality expectation (Vroom, 1964). Thus, training participation is associated with the valence of training and linked to trainees' motivation to leave the organization. Accordingly, our H_2 positively predicted employee turnover intentions meaning that, when employees receive organized training, they are most likely to leave their organizations for other firms. This finding validates those of Fallon and Rice (2015), Pedler et al. (1991) and Senge (1990) who argued that training participation and development programmes improve the value of the workers, and enhance their career growth elsewhere and therefore, they may be motivated to move there. This explains further that when workers believe that they have improved their knowledge, skills and abilities through personal development and training, they tend to look elsewhere for better condition of work and thereby, increasing their intention to leave their firms.

The implication or importance of this finding is attributed to how employees perceive or interpret external outcomes as better than their present conditions, and therefore, the possibility to leave for the external attractions. This can be likened to the common phenomenon of the impact of brain drain in the extractive and automobile industries in Africa where contemporary skills of workers are very much desired by competitive firms abroad. Thus, it is common to see engineering workers in manufacturing companies jumping to analogous firms after acquiring certain levels of experience. This is in a daily occurrence in many developing countries especially those in the sub-Saharan Africa (SSA) region. Accordingly, most SSA economies are bleeding from experienced skills leaving not only in the manufacturing sectors, but higher educational institutions and the health sectors as well. This canker normally referred to as 'brain drain' is seriously affecting most African countries due to low income levels and other external motivational attractions. This problem renders most SSA institutions ill-endowed as these firms produce skillful employees only to export them involuntarily to more competitive firms rather than the expectations to stay and help to improve their own companies.

Theoretical and Managerial Contributions of Training participation in Manufacturing Firms

This work is premised on training participation of employees and its effects on performance and turnover intentions of employees in manufacturing firms. A key question is the extent to which the findings make unique contributions, and thereby can be of broader relevance across manufacturing firms in developing countries. Theoretically, the results provide evidence of training participation on positive employee performance. By this, this work suggest that planned organizational training for employees would develop employee career growth and nurture their talent which would consequently yield superior and faster organizational growth. The implication is that individual effort to performance is motivated by the training received in the organization. This perspective focuses on talent development approaches which are measured as significant high-performance work practices that are associated with greater organizational performance (Garavan et al., 2012: Abugre and Nasere (2020) resulting from the training.

Therefore, this study extends the literature on employee performance through training participation of employee skills development with a focus on understudied manufacturing sector in SSA. A talented workforce through planned training and acquisition of skills is critical for manufacturing companies, and more so for those in SSA that are in the process of making large capital investments in plant expansion.

The second theoretical contribution is that, this work examined training participation of employee on their intention to leave. Although literature on training suggest that when employees receive training from their organizations, they (employees) would normally stay as they feel an urge for social exchange (Newman et al., 2011; Kampkotter and Marggraf, 2015). The findings from this study suggest otherwise. It is probably because writers have not paid much attention to employee valence and instrumentality expectation. The valence-instrumentality-expectation model explains the motivation of an employee's expectation that he/she has the ability to make a good contribution and an anticipated reward elsewhere (Vroom, 1964; Williams et al., 1991). Thus, this work contributes to the theoretical significance of the valence-instrumentality-expectancy theory which anchors this work and provides valuable insights into the process of employee training and their intentions to leave. In this way, our work argues that individuals are influenced by their affective outcomes therefore, based on the exchange processed by the individual after receiving training, he/she would be motivated to transfer his/her skills elsewhere or in different organization where he/she may feel more valued. This means when individuals are not satisfied with their needs and expectations, engagement with their current organization would not be effective irrespective of the amount of training they receive from the firm. Hence, many trained professionals from most developing countries are driven by their value expectation of developed countries resulting in high turnover in the context of the former.

Additionally, our work contributes and validates the works of Gersbach and Schmutzler (2012) and Rzepka and Tamm (2016) that, the negative effect of broad organizational training participation is the fact that the training is not specific to the organization that provides it, but also to the sector in general. Hence, the motivation for mobility and accessibility of jobs within the same industry. This implies that there is a high risk of trained employees will be poached by other organizations leading to turnover of employees in the originating organization. Accordingly, the value employees place on specific outcomes of training should be considered as aspects of needs assessment of training programmes in order to minimize turnover intentions of trainees.

In terms of managerial contribution, the collective findings of this work suggest potentially useful managerial lessons for practitioners and academics. Practically, the study suggests that organizations desiring strategic outcomes must establish training mechanisms that enable employees to perform on their duties with the new skills acquired. When manufacturing firms invest in training, they are really investing in people who will be motivated to make the best use of the invested capital to deliver results, leading to the totality of organizational performance.

Second, firms must learn from this work and be aware that different motivation and expectations of training participation are hunted for by employees. Whilst some employees may be motivated to increase their performance after training, others would be motivated to want to leave for other firms after training. HR managers and organizations must therefore study the trends of employees' demand in relations to their career development in order to minimize cost implications of turnover of employees after training. On the other hand, HR managers and firms must encourage organizational programs that help to develop their human resources into capable skills for this global competitiveness. The desirability to use firm specific training or general industrial training will depend on needs assessment of both the employees and the organization in question. Therefore, Management of manufacturing companies should go beyond organized training to assessing more of employee value for the training by improving employee engagement through a host of HR initiatives (e.g. better career planning and development, more participatory decision making, more equitable reward systems, etc.).When a low-performing employee leaves, it may be in the interest of the organization, and hence worthwhile. In contrast, when a high-performing employee leaves especially after training, it is dysfunctional and a serious concern to the firm. In developing countries, voluntary turnover is quite high, which is dysfunctional, and therefore, requires critical attention. This calls for continuous learning in most organizations in SSA environment as most SSA institutions and organizations are struggling to compete with the more technologically advanced companies in the developed world. Also, the possibility of introducing bond signing by employees who embark on both short and long-term training may be employed by management to arrest the turnover flow.

Limitations and Avenues for Future Research

Like most empirical research, this study has its limitations. The first limitation includes the usage of cross-sectional data; therefore, care should be taken in making causal inference regarding the relationships in this study. Nevertheless, the researchers believe that it is a good start to measure the factors of employee training vis-à-vis performance and turnover of employees. Second, our data collection was based on one single manufacturing firm, and therefore generalization of the study may not be totally justified across other manufacturing organizations. Besides, the sample size is also too small to warrant a larger generalization. Nonetheless, in a single manufacturing company, a sample size of this nature is desirable and acceptable. Based on the above, future studies may take these weaknesses into consideration.

Thus, the findings of our work should be replicated in other SSA settings with different types of training programs. We recommend that the approach be expanded to include variables related to the motivation and transfer of behaviors learnt during training. We also consider the results of this study to be a first step toward the development of an integrative model of training motivation. Thus, future research needs to consider the scope and nature of training programs for example general or specific training and the individual and situational variables that influence training effectiveness.

Overall, the study highlights that training participation can lead to employee performance and at the same time employee turnover intensions. It offers insights into the importance of training to both manufacturing companies and the employees who work in these companies.

References

Abbas, Q. and Yaqoob, S. (2009). Effect of leadership development on employee performance in Pakistan. *Pakistan Economic and Social Review, 47*(2), 269-292.

Abugre, J. B., and Adebola, K. (2015). An examination of training and development of middle level managers in emerging economies. *International Journal of Organizational Analysis, 23*(4), 545 – 563.

Abugre, J. B., and Nasere, D. (2020). Do high-performance work systems mediate the relationship between HR practices and employee performance in multinational corporations (MNCs) in developing economies? *African Journal of Economic and Management Studies*. Early Cite

Al-Alawiyat, A. (2010). *Training as motivational tool for the job satisfaction in Saudi Arabia*. An unpublished Master thesis, Open University of Malaysia, Malaysia.

Armstrong, M. (2009). *A handbook of human resource management practice*, London: Kogan Page Limited.

Babin, B. J., and Boles, J. S. (1998). Employee behaviour in a service environment: a model and test of potential differences between man and woman", *Journal of Marketing, 6,* 77- 91.

Bambacas, M., and Kulik, T. C. (2013). Job embeddedness in China: How HR practices impact turnover intentions. *The International Journal of Human Resource Management*. *24*(10), 1933-1952.

Barber, J. (2004). Skill upgrading within informal training: Lessons from the Indian auto mechanic. *International Journal of Train and Development, 8*, 128–39.

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5), 9-49.

Becker, G.S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education.* (3rd edition). Chicago, IL: University of Chicago Press.

Bednall, T. C., Sanders, K., and Runhaar, P. (2014). Stimulating informal learning activities through perceptions of performance appraisal quality and human resource management system strength: A two-wave study. *Academy of Management Learning & Education*, *13*(1), 45-61.

Benson, G. S., Finegold, D., and Mohrman, S. A. (2004). You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover. *Academy of Management Journal*, *47*, 315-331

Benson, G.S. (2006). Employee development, commitment and intention to turnover: a test of employability policies in action. *Human Resource Management Journal*, *16*(2), 173-190.

Bloisi, W. (2007). *An introduction to human resource management*. Berkshire: McGraw-Hill.

Brum, S. (2007). *What impact does training have on employee commitment and employee turnover?* Schmidt Labor Research Center Seminar Research Series. University of Rhode Island.

Campbell, J. P. (1989). Training design for performance improvement. In J. P. Campbell & R. J. Campbell (Eds.), *Productivity in organizations (pp.* 177-216). San Francisco: Jossey-Bass.

Cappelli, P. (1999). *The new deal at work*. Boston: Harvard Business School Press.

Cheng, Y., and Waldenberger, F. (2013). Does training affect individuals' turnover intention? Evidence from China. *Journal of Chinese Human Resources Management, 4*(1), 16 – 38.

Chukwu, G. M. (2016). Trainer attributes as drivers of training effectiveness. *Industrial and Commercial Training*. *48*(7), 367-373.

DeNisi, A. S., and Griffin, R. W. (2005). *Human resource management*. Boston, NY: Houghton Mifflin Company.

Dermol, V., and Čater, T. (2013). The influence of training and training transfer factors on organizational learning and performance. *Personnel Review, 42*(3), 324-348.

Dessler, G. (2006). *A Framework for human resource management.* New Jersey: Pearson Prentice Hall.

Evans, W.R., and Davis, W.D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management, 31*(5), 758-775.

Fallon, B. J., and Rice, S. M. (2015). Investment in staff development within an emergency services organisation: Comparing future intention of volunteers and paid employees. T*he International Journal of Human Resource Management, 26*(4), 485-500.

Fornell, C., and Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research, 18*(1), 39-50.

Garavan, T.N., Carbery, R., and Rock, A. (2012). Mapping talent development: definition, Scope and architecture. *European Journal of Training and Development, 36*(1), 5-24.

Gersbach, H., and Schmutzler, A. (2012). A product–market theory of industry–specific Training. *The Rand Journal of Economics, 43*(3), 475-491.

Ghosh, R., and Reio Jr., T. G. (2013). Career benefits associated with mentoring for mentors: A meta-analysis. *Journal of Vocational Behaviour, 83*, 106 -116.

Green, F., Felstead, A., Mayhew, K., and Pack, A. (2000). The impact of training on labour mobility: Individual and firm-level evidence from Britain. *British Journal of Industrial Relations, 38*, 261-275.

Grober, P., Warnich, S., Carrell, M., Elbert, N., and Hatfield, R. (2002). *Human resource management in South Africa*. London: Thompson Learning.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2010). *Multivariate data analysis.* New Jersey: Prentice Hall.

Hu, L. T., and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55.

Ibrahim, R., Boerhannoeddin, A., and Bakare, K. K. (2017). The effect of soft skills and training methodology on employee performance. *European Journal of Training and Development, 41*(4), 388-406.

Kampkötter, P., and Marggraf, K. (2015). Do employees reciprocate to intra-firm trainings? An analysis of absenteeism and turnover rates. *The International Journal of Human Resource Management, 26*(22), 2888-2907.

Khanfar, S.M. (2011). Impact of training on improving hotelling service quality. *Journal of Business Studies Quarterly, 2*(3), 84-93.

Kraimer, M. L., Seibert, S. E., Wayne, S. J., Liden, R. C., and Bravo, J. (2011). Antecedents and outcomes of organizational support for development: The critical role of career opportunities. *Journal of Applied Psychology, 96,* 485–500.

Loewenstein, M. A., and Spletzer, J. R. (1997). Delayed formal on-the-job training. *Industrial and Labor Relations Review, 51*(1), 82-99

Loewenstein, M. A., and Spletzer, J.R. (1999). General and specific training: Evidence and implications. *The Journal of Human Resources, 34*(4), 710-733.

Lynch, L. M. (1991). The role of off-the-job vs. on-the-job training for the mobility of women workers. *American Economic Review,81*(2),151-56.

Mathieu, J. E., Tannenbaum, S. I., and Salas, E. (1992). Influences of individual and situational characteristics on measures of training effectiveness. *Academy of Management Journal, 35*(4), 828-847.

Newman, A., Thanacoody, R., and Hui, W. (2011). The impact of employee perceptions of training on organisational commitment and turnover intentions: A study of multinationals in the Chinese service sector. *International Journal of Human Resource Management, 22*(8), 1765-1787.

Nguyen, T. N., Truong, Q., and Buyens, D. (2010). The relationship between training and firm performance: A literature review. *Research & Practice in Human Resource Management, 18* (1), 28–45

Park, J. H., Newman, A., Zhang, L., Wu, C., and Hook, A. (2015). Mentoring functions and turnover intention: The mediating role of perceived organizational support. *The International Journal of Human Resource Management, 27*(11), 1173-1191.

Pedler, M., Burgoyne, J., and Boydell, T. (1991). *The learning company. a strategy for sustainable development*. London: McGraw-Hill.

Podsakoff, P. M., and Mackenzie, S. B. (1989). A second-generation measure of organizational citizenship behaviour. *Working paper,* Indiana University, Bloomington.

Rahman, W., and Nas, Z. (2013). Employee development and turnover intention: theory validation. *European Journal of Training and Development, 37*(6), 564 – 579.

Rao, V.S. (2011). *Human resource management: Text and cases.* New Delhi: Excel Book.

Rzepka, S., and Tamm, M. (2016). Local employer competition and training of workers. *Applied Economics, 48*(35), 3307-3321.

Seibert, S. E., and Kraimer, M. L. (2001), A social capital theory of career success, Academy of Management Journal, *44*(2), 219-237.

Senge, P. (1990). The leaders new work. Building learning organizations. *Slone Management Review, 32*(1), 7-23.

Shah, S. M. A., Shan, T. A., and Abbas, S. H. (2014). Impact of on-the-job training on employee performance: A case study of microfinance banks in district Khairpur. *International Journal of Computers and Technology, 13*(5), 4524-4529.

Smith, K. T. (2010). Work-life balance perspectives of marketing professionals in generation Y. *Services Marketing Quarterly, 31*, 434–447.

Úbeda-García, M., Cortés, E. C., Marco-Lajara, B., and Zaragoza-Sáez, P. (2014). Strategy, training and performance fit. *International Journal of Hospitality Management, 42*, 100 - 116.

Vroom, V. H. (1964). *Work and motivation.* New York: Wiley.

Williams, T. C, Thayer, P. W., and Pond, S. B. (1991). T*est of a model of motivational influences on reactions to training and learning.* Paper presented at the 6th Annual Conference of Industrial and Organizational Psychology, St. Louis.

Wise, J. (2014). Leveraging employee development planning (EDP) for performance advantage. *Industrial and Commercial Training, 46*(4), 194-200.

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HOW TO REFERENCE TUTORIAL: https://library.sydney.edu.au/help/online-training/referencing/

ACADEMIC LIAISON LIBRARIANS: https://library.sydney.edu.au/contacts/subjectcontacts.html

Acknowledgement: The material contained in this document has been adapted, with permission of the authors, from the following publication:

University of Canberra Library & Academic Skills Program. (2010). *A guide to referencing with examples in the APA & Harvard styles* (6th ed.). Retrieved from the University of Canberra Library website: http://www.canberra.edu.au/library/attachments/pdf/apa.pdf

Document originally revised by K. Masters, July 2014

Updated by E. Tam and J. Ulyannikova, January 2016

Updated by M. Cassin, March 2017

Updated by J. Guo, June 2018

	IN-TEXT REFERENCE	REFERENCE LIST
BOOKS & BOOK CHAPTERS		
One author – in-text reference placement ***Note:*** There are two main ways to use in-text references. Firstly, to focus on the information from your source – 'information prominent'. Secondly, to focus on the author – 'author prominent'.	***'Information prominent' (the author's name is within parentheses):*** The conclusion reached in a recent study (Cochrane, 2007) was that… ***OR*** ***'Author prominent' (the author's name is outside the parentheses):*** Cochrane (2007) concluded that…	Cochrane, A. (2007). *Understanding urban policy: A critical approach.* Malden, MA: Blackwell Publishing.
One author – when fewer than 40 words are quoted Include the material in the paragraph and include specific page number/s. Use **quotation marks** to show the exact words.	An interesting view was expressed that "the connection of high profile developments to their surrounding environment has increasingly been questioned" (Cochrane, 2007, p. 117). ***OR*** An interesting view was expressed by Cochrane (2007) that "the connection of high profile developments to their surrounding environment has increasingly been questioned" (p. 117).	Cochrane, A. (2007). *Understanding urban policy: A critical approach.* Malden, MA: Blackwell Publishing.
One author – when 40 or more words are quoted Begin quoting the material on a new line, indent it 5 spaces (use the indent tool to keep all lines of the quote evenly indented), and include specific page number/s. **Omit** the quotation marks. Use **double spacing** for both your text and the indented quote. Make sure the quote is **exactly** as it was published.	Much has been written about acute care. Finkelman (2006), for example, points out that: > There are many changes in acute care services occurring almost daily, and due to the increasing use of outpatient surgery, surgical services have experienced major changes. Hospitals are increasing the size of their outpatient or ambulatory surgery departments and adjusting to the need of moving patients into and out of the surgical service in 1 day or even a few hours. (p. 184). Recently, this trend has been seen in some Australian hospitals and research here…	Finkelman, A. W. (2006). *Leadership and management in nursing.* Upper Saddle River, NJ: Pearson Prentice Hall.

	IN-TEXT REFERENCE	REFERENCE LIST
Two authors	When considering the Howard Government's Indigenous health expenditure, Palmer and Short (2010) maintain that…	Palmer, G. R., & Short, S. D. (2010). *Health care and public policy: An Australian analysis* (4th ed.). Melbourne, Australia: Palgrave Macmillan.
Three to five authors For the first in-text reference, list all the authors' family names, then use the first author's family name followed by 'et al.' for subsequent entries.	A recent study (Seeley, VanPutte, Regan, & Russo, 2011) concluded that… ***Subsequent in-text reference/s:*** (Seeley et al., 2011).	Seeley, R., VanPutte, C., Regan, J., & Russo, A. (2011). *Seeley's anatomy & physiology*. New York, NY: McGraw-Hill.
Six to seven authors For all in-text references, list only the first author's family name followed by 'et al.' All authors are included in the Reference List. ***For books with eight or more authors, please follow the guidelines for journal articles with eight or more authors on page 7.***	The Russian Revolution may never have succeeded if there hadn't already been widespread discontent among the Russian populace (Bulliet et al., 2005).	Bulliet, R. W., Crossley, P. K., Headrick, D. R., Hirsch, S. W., Johnson, L. L., & Northrup, D. (2011). *The earth and its peoples: A global history* (5th ed.). Boston, MA: Wadsworth.
Works by different authors with the same family name For in-text references, include the initials of the authors in question to enable readers to differentiate between them. List references alphabetically by the authors' initials in the Reference List.	These techniques have been shown to improve test scores among primary school aged children (R. Smith, 2010). If funding were enhanced, it is arguable these problems could be ameliorated (C. J. Smith & Laslett, 1993).	Smith, C., & Laslett, R. (1993). *Effective classroom management: A teacher's guide* (2nd ed.). London,United Kingdom : Routledge. Smith, R. (2010). *Rethinking teacher education: Teacher education in the knowledge age*. Sydney, Australia: AACLM Press.

	IN-TEXT REFERENCE	REFERENCE LIST
Several works by the same author in different years When citing references separately, no special rule needs to be observed. When citing references collectively, separate years with a comma and insert years earliest to latest. List references chronologically (earliest to latest) in the Reference List.	These techniques have changed markedly in the last decade (Greenspan, 2000, 2011).	Greenspan, A. (2000). *Orthopedic radiology: A practical approach* (3rd ed.). Philadelphia, PA: Lippincott Williams & Wilkins. Greenspan, A. (2011). *Orthopedic imaging: A practical approach* (5th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
Several works by the same author in the same year Arrange alphabetically by title in the Reference List. Place lowercase letters ("a", "b", "c", etc.) immediately after the year.	Leadership and change in schools have been major topics of discussion for several years (Fullan, 1996a, 1996b) and this conference… "Educational change" has taken on a new meaning in recent years (Fullan, 1996b) …	Fullan, M. (1996a). Leadership for change. In *International handbook for educational leadership and administration.* New York, NY: Kluwer Academic . Fullan, M. (1996b). *The new meaning of educational change*. London,United Kingdom: Cassell.
Several authors, different years, referred to collectively in your work List sources alphabetically by family name in the in-text reference in the order in which they appear in the Reference List. Separate each reference with a semicolon.	The cyclical process (Carr & Kemmis, 1986; Dick, 2000; Kemmis & McTaggart, 1988; MacIsaac, 1995) suggests…	Carr, W., & Kemmis, S. (1986). *Becoming critical: Education knowledge and action research.* London,United Kingdom: Falmer Press. Dick, B. (2000). *A beginner's guide to action research.* Retrieved from http://www.scu.edu.au/schools/gcm/ar/arp/guide.html Kemmis, S., & McTaggart, R. (Eds.). (1988). *The action research planner* (3rd ed.). Melbourne, Australia: Deakin University Press.

	IN-TEXT REFERENCE	REFERENCE LIST
eBook – online book - If the URL leads to information about how to obtain the book, use "Available from" instead of "Retrieved from". - ***If the eBook has a DOI, add this in.***	We found helpful information about deaf children (Niemann, Greenstein, & David, 2004) that meant we could… ***OR*** Schiraldi (2001) offers solutions to PTSD.	Niemann, S., Greenstein, D., & David, D. (2004). *Helping children who are deaf: Family and community support for children who do not hear well.* Retrieved from http://www.hesperian.org/publications_download_deaf.php Schiraldi, G. R. (2001). *The post-traumatic stress disorder sourcebook: A guide to healing, recovery, and growth* [Adobe Digital Editions version]. doi:10.1036/0071393722
An article/ chapter in eBook ***If the article/ chapter has a DOI, add this in.***	Screening is helpful to identify major depression in adults (Williams & Nieuwsma, 2016) …	Williams, J., & Nieuwsma, J. (2016). Screening for depression in adults. In J. A. Melin (Ed.), *UpTpDate*. Retrieved from https://www.uptodate.com/contents/screening-for-depression-in-adults
Chapter in edited book	A discussion about Australia's place in today's world (Richards, 1997) included reference to… ***OR*** Richards (1997) proposed that…	Richards, K. C. (1997). Views on globalization. In H. L. Vivaldi (Ed.), *Australia in a global world* (pp. 29-43). Sydney, Australia: Century.
Brochure – author is also publisher	The security of personal information is addressed in the TransACT brochure (TransACT, n.d.)	TransACT . (n.d.). *Guide to equipment and service* [Brochure]. Canberra, Australia: Author.
Editor	In discussing best practice, Zairi (1999) identified… ***OR*** Best practice indicators in management have been identified (Zairi, 1999) and…	Zairi, M. (Ed.). (1999). *Best practice: Process innovation management.* Oxford,United Kingdom: Butterworth-Heinemann.

	IN-TEXT REFERENCE	REFERENCE LIST
Compiler, *or* Reviser, *or* Translator Use the following abbreviations after the person's name in the Reference List: Comp. Rev. Trans.	This novel by Gaarder (1991/1994) provides an appealing approach to… ***OR*** Socrates has been described as "enigmatic" (Gaarder, 1991/1994, p. 50) which provides us with…	Gaarder, J. (1994). *Sophie's world: A novel about the history of philosophy* (P. Møller, Trans.). London,United Kingdom: Phoenix House. (Original work published 1991).
Corporate author – when the author is also the publisher Spell out the full name of the body each time it is cited in-text, unless it is long and has a familiar/easily understood abbreviation. In the latter case, give the full name with the abbreviation for the first in-text reference. Use the abbreviation only for subsequent references.	A recent study (Australian Institute of Health and Welfare [AIHW], 2009) highlighted … ***Subsequent in-text reference/s:*** The AIHW (2009) found that…	Australian Institute of Health and Welfare. (2009). *Indigenous housing needs 2009: A multi-measure needs model* (AIHW cat. no. HOU 214). Canberra, Australia: Author.
Corporate author – commissioned reports	The report prepared by the South Australian Centre for Economic Studies (2009) was discussed.	South Australian Centre for Economic Studies. (2009). *Local government's current and potential role in water management and conservation: Final report.* Commissioned by the Local Government Association of South Australia. Adelaide, Australia: Author.
No date of publication	Some aspects of forensic science are more challenging than others (Browne, n.d.) and for this reason…	Browne, J. D. (n.d.). *Forensic science as a career*. London, England: Tower.
Second or later edition	Peters (2001, p. 6) argued that "..."	Peters, T. (2001). *The elements of counselling* (2nd ed.). Brisbane, Australia: Macmillan.
Multi-volume work	Inge, Duke and Bryer (1978, p. 27) claim that there is much to learn about these writers which results in… ***OR*** There is so much to learn about our country (Clark, 1978, p. 42) that we kept returning to…	Inge, M. T., Duke, M., & Bryer, J. R. (Eds.). (1978). *Black American writers: Bibliographical essays* (Vols. 1-2). New York, NY: St. Martins. Clark, C. M. H. (1978). *A history of Australia: Vol. 4*. *The earth abideth for ever, 1851-1888.* Australia: Melbourne University Press.

	IN-TEXT REFERENCE	REFERENCE LIST
DICTIONARY / ENCYCLOPAEDIA		
Dictionary / Encyclopaedia – print Include information about editions, volume numbers and page numbers in parenthesis following the title in the Reference List.	According to one definition of "bivalence" (VandenBos, 2007, p. 123)…	VandenBos, G. R. (Ed.). (2007). *APA dictionary of psychology.* Washington, DC: American Psychological Association.
Dictionary / Encyclopaedia – online Include information about editions, specific volume numbers or page numbers in parenthesis following the title in the Reference List.	A psychological overview of ADHD (Arcus, 2001)…	Arcus, D. (2001). Attention deficit / hyperactivity disorder (ADHD). In B. Strickland (Ed.), *The Gale encyclopedia of psychology.* Retrieved from http://www.gale.cengage.com/ ***Note:*** If retrieved from a database, do a Web search for the home page of the publisher of the encyclopaedia and use the URL in the reference.
JOURNAL, NEWSPAPER & NEWSLETTER ARTICLES		
Journal article with one author – separated paging (paginated by issue) If each issue of a journal begins on page 1, include the issue number in parenthesis immediately after the volume number in the Reference List. ***If the journal article has a DOI, add this in.***	In an earlier article, it was proposed (Jackson, 2007)…	Jackson, A. (2007). New approaches to drug therapy. *Psychology Today and Tomorrow, 27*(1), 54-59. Dempsey, I. (2012). The use of individual education programs for children in Australian Schools. *Australasian Journal of Special Education, 36*(1), 21-31. doi:10.1017/jse.2012.5
Journal article with two authors – continuous paging throughout a volume. If the journal volume page numbers run continuously throughout the year, regardless of issue number, do **not** include the issue number in your Reference List entry. ***If the journal article has a DOI, add this in.***	Kramer and Bloggs (2002) stipulated in their latest article… ***OR*** This article on art (Kramer & Bloggs, 2002) stipulated that…	Kramer, E., & Bloggs, T. (2002). On quality in art and art therapy. *American Journal of Art Therapy, 40,* 218-231.

	IN-TEXT REFERENCE	REFERENCE LIST
Journal article with three to five authors For the first in-text reference, list all the authors' family names, then use the first author's family name followed by 'et al.' for subsequent entries. ***If the journal article has a DOI, add this in.***	A recent study to investigate the effects of an organisational stress management program on employees (Elo, Ervasti, Kuosma, & Mattila, 2008) concluded that… ***Subsequent in-text reference/s:*** (Elo et al., 2008)	Elo, A., Ervasti, J., Kuosma, E., & Mattila, P. (2008). Evaluation of an organizational stress management program in a municipal public works organization. *Journal of Occupational Health Psychology*, *13*(1), 10-23. doi: 10.1037/1076-8998.13.1.10
Journal article with six to seven authors For all in-text references, list only the first author's family name followed by 'et al.' All authors are included in the Reference List. ***If the journal article has a DOI, add this in.***	A simple ALMA is described in a recent study (Restouin et al., 2009).	Restouin, A., Aresta, S., Prébet, T., Borg, J., Badache, A., & Collette, Y. (2009). A simplified, 96-well–adapted, ATP luminescence–based motility assay. *BioTechniques, 47*, 871–875. doi: 10.2144/000113250
Journal article with eight or more authors For all in-text references, list only the first author's family name followed by 'et al.' In the Reference List, include the first six authors' names, then insert three ellipsis points (...), and add the last author's name. ***If the journal article has a DOI, add this in.***	Traumatic injury is the leading cause of death and disability worldwide (Steel et al., 2010).	Steel, J., Youssef, M., Pfeifer, R., Ramirez, J. M., Probst, C., Sellei, R., ... Pape, H. C. (2010). Health-related quality of life in patients with multiple injuries and traumatic brain injury 10+ years postinjury. *Journal of Trauma: Injury, Infection, and Critical Care, 69*(3), 523-531. doi: 10.1097/TA.0b013e3181e90c24
Journal or magazine article with no volume or issue number ***If the journal article has a DOI, add this in.***	Wychick and Thompson (2005) foreshadow that scam will still be enticing… ***OR*** An interesting approach to scam (Wychick & Thompson, 2005) suggested that…	Wychick, J., & Thompson, L. (2005, November 24). Fallen for a scam lately? *AustraliaToday,* 54-60.

	IN-TEXT REFERENCE	REFERENCE LIST
Journal article retrieved from a database – with a DOI (Digital Object Identifier) A DOI is a unique, permanent identifier assigned to articles in many databases. **Always** include the DOI if one is provided (usually in the article's full-text, abstract or database record). If there is a DOI, no other retrieval information is necessary.	A study examining priming (Johns & Mewhort, 2009) discovered …	Johns, E., & Mewhort, D. (2009). Test sequence priming in recognition memory. *Journal of Experimental Psychology: Learning, Memory and Cognition, 35*, 1162-1174. doi: 10.1037/a0016372
Journal article – in press	Influence of music in running performance (Lee & Kimmerly, in press) …	Lee, S., & Kimmerly, D. (in press). Influence of music on maximal self-paced running performance and passive post-exercise recovery rate. *The Journal of Sports Medicine and Physical Fitness*.
Journal article – Cochrane Review with DOI	Overweight and obesity are increasing throughout the industrialised world (Shaw, O'Rourke, Del Mar, & Kenardy, 2005) …	Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2005). Psychological interventions for overweight or obesity. *The Cochrane database of systematic reviews* (2). doi:10.1002/14651858.CD003818.pub2
Journal article retrieved from a database – without a DOI - If there is no DOI, do a Web search to locate the URL of the journal's home page & include it in the Reference List. The journal URL can sometimes be found in the database record or in the full text view of the article. - If the online article is ONLY available from a database (e.g. for discontinued journals where the journal home page doesn't exist), include the entry page URL of the database where it was found. Give the database name if not in the URL.	The effects of climate change on agriculture are studied by Ramalho, Da Silva and Dias (2009)… Primary care is one area marked for improvement (Purtilo, 1995).	***Example using URL of journal home page:*** Ramalho, M., Da Silva, G., & Dias, L. (2009). Genetic plant improvement and climate changes. *Crop Breeding and Applied Biotechnology, 9*(2), 189-195. Retrieved from http://www.sbmp.org.br/cbab ***Example using URL of database (where there is no journal home page):*** Purtilo, R. (1995). Managed care: Ethical issues for the rehabilitation professions. *Trends in Health Care, Law and Ethics, 10*, 105-118. Retrieved from http://www.proquest.com

	IN-TEXT REFERENCE	REFERENCE LIST
Book review in a journal	In his review of Thomas Samaras' latest book, Marson (2009) identifies…	Marson, S. M. (2009). How big should we be? A Herculean task accomplished [Review of the book *Human body size and the laws of scaling: Physiological, performance, growth, longevity and ecological ramification,* by T. Samaras]. *Public Health Nutrition, 12*, 1299–1300. doi:10.1017/S1368980009990656
Newspaper article – with an author	The notion of a Bill of Rights may be inappropriate in the Australian context (Waterford, 2007).	Waterford, J. (2007, May 30). Bill of Rights gets it wrong. *The Canberra Times,* p. 11.
Newspaper article – without an author	The redesign of the Internet ("Internet pioneer", 2007) is said to…	Internet pioneer to oversee network redesign. (2007, May 28). *The Canberra Times,* p. 15.
Newspaper article retrieved from a database Do a Web search to locate the URL of the newspaper's home page & include it in the Reference List.	In an attempt to save the tiger, Darby (2002) provided…	Darby, A. (2002, August 20). Rarest tiger skin a rugged survivor. *Sydney Morning Herald.* Retrieved from http://www.smh.com.au
Article in an online newsletter	Australia's casualty rate was almost 65 per cent - the highest in the British Empire ("Australians and the Western Front", 2009)	Australians and the Western Front. (2009, November). *Ozculture newsletter.* Retrieved from http://www.cultureandrecreation. gov.au/ newsletter/

CONFERENCE / SEMINAR PAPERS

Conference or seminar papers in published proceedings – print If the paper is from a book, use the Book chapter citation format. If it is from regularly published proceedings (e.g. annual), use the Journal article citation format.	In a paper about conservation of photographs (Edge, 1996), the proposition that…	Edge, M. (1996). Lifetime prediction: Fact or fancy? In M. S. Koch, T. Padfield, J. S. Johnsen, & U. B. Kejser (Eds.), *Proceedings of the Conference on Research Techniques in Photographic Conservation* (pp. 97-100). Copenhagen, Denmark: Royal Danish Academy of Fine Arts.

	IN-TEXT REFERENCE	REFERENCE LIST
Conference or seminar papers in published proceedings – online	Tester (2008) points to the value of using geothermal sources for power and energy.	Tester, J. W. (2008). The future of geothermal energy as a major global energy supplier. In H. Gurgenci & A. R. Budd (Eds.), *Proceedings of the Sir Mark Oliphant International Frontiers of Science and Technology Australian Geothermal Energy Conference,* Canberra, Australia: Geoscience Australia. Retrieved from http://www.ga.gov.au/image_cache/GA11825.pdf

GOVERNMENT PUBLICATIONS

Government department as author Spell out the full name of the body each time it is cited in-text, unless it is long and has a familiar/easily understood abbreviation. In the latter case, give the full name with the abbreviation for the first in-text reference. Use the abbreviation for subsequent references.	The need for guidelines to manage and use multiple channels to deliver e-government services (Department of Finance and Administration [DOFA], 2006) presents Australian Government agencies with… ***Subsequent in-text reference/s:*** DOFA (2006) identified …	Department of Finance and Administration. (2006). *Delivering Australian Government services: Managing multiple channels.* Canberra, Australia: Author.
Government publication – with identifying number Includes report numbers, catalogue numbers, etc.	Recently released statistics from the Australian Bureau of Statistics (ABS) (2007) reveal interesting changes in Australian society. ***Subsequent in-text reference/s:*** The ABS (2007) reported that …	Australian Bureau of Statistics. (2007). *Australian social trends* (Cat. no. 4102.0). Canberra, Australia: ABS.
Government report – online	***First in-text reference:*** A recent government report (Department of the Prime Minister and Cabinet [PM&C], 2008) examines a selection of key topics … ***Subsequent in-text reference/s:*** Families in Australia were highlighted (PM&C, 2008)…	Department of the Prime Minister and Cabinet. (2008). *Families in Australia: 2008.* Retrieved from http://www.dpmc.gov.au/publications/families/index.cfm#contact
Government approved standards	…and "including data in computer systems, created or received and maintained by an organisation" (Standards Australia, 1996, p. 7) as well as…	Standards Australia. (1996). *Australian Standard AS 4390: Records Management.* Sydney, Australia: Author.

	IN-TEXT REFERENCE	REFERENCE LIST
LEGISLATION		
Note: For more comprehensive information please consult the following publication: *The bluebook: A uniform system of citation* (19th ed.). (2010). Cambridge, MA: Harvard Law Review Association.		
Act – print	According to s. 8.1 of the *Anti-Discrimination Act 1977* (NSW), it is unlawful for an employer to discriminate against a person on the ground of race.	*Anti-Discrimination Act 1977* (NSW) s. 8.1 (Austl.). ***Follow this convention:*** *Short Title of the Act* (in italics) Y*ear* (in italics) (Jurisdiction abbreviation) Section number Subdivision, if relevant (Country abbreviation).
Bill – print	The Mental Health Bill 2013 (WA) prohibits…	Mental Health Bill 2013 (WA) (Austl.). ***Follow this convention:*** Bill Name (no italics) Year (Jurisdiction abbreviation) (Country abbreviation).
Act & Bill – online	According to s. 8.1 of the *Anti-Discrimination Act 1977* (NSW), it is unlawful for an employer to discriminate against a person on the ground of race.	*Anti-Discrimination Act 1977* (NSW) s. 8.1 (Austl.). Retrieved from http://www.legislation.nsw.gov.au/maintop/scanact/inforce/NONE/0
Case	According to Ellis v. Wallsend District Hospital (1989)… …in a land right case (*Mabo v. Queensland*, 1988)…	*Ellis v. Wallsend District Hospital* 1989 17 NSWLR 553 (Austl.). *Mabo v. Queensland* 1988 166 CLR 186 (Austl.). ***Follow this convention:*** *Case Name* (in italics) Year Volume number Reporter abbreviation First page number (Country abbreviation).
IMAGES, MUSIC & AUDIOVISUAL MEDIA		
CD recording	Lyrics from Paul Kelly's song "From Little Things Big Things Grow" (Kelly, 1997, track 10) were used in recent television advertisements.	Kelly, P. (1997). From little things big things grow. On *Songs from the south: Paul Kelly's greatest hits* [CD]. Melbourne, Australia: Mushroom Records.
DVD / Videorecording	Jane Austen's world came alive in *Sense and sensibility* (Lee, 1995)	Lee, A. (Director). (1995). *Sense and sensibility* [DVD]. Australia: Columbia TriStar Home Video.

	IN-TEXT REFERENCE	REFERENCE LIST
Figure, Table, Graph, Map or Chart Cite each of these as you would for a book. Include, in square brackets, the type of entry immediately after the title: [Figure]. [Table]. [Map]. [Graph]. [Chart].	**Graph** The internal processes were well described (Kaplan & Norton, 2004) which led to… **Map** To locate a property just outside the Australian Capital Territory, use the 1:100 000 map produced by Geoscience Australia (2004) which covers…	**Graph** Kaplan, R. S., & Norton, D. P. (2004). Internal processes deliver value over different time horizons [Graph]. In *Strategy maps: Converting intangible assets into tangible outcomes* (p. 48). Boston, MA: Harvard Business School. **Map** Geoscience Australia [NATMAP] (Cartographer). (2004). *ACT region, New South Wales and Australian Capital Territory* [Map]. Canberra, Australia: Author.
Image – online	The effective use of light in Monet's 'Haystacks' (Monet, 1890)…	Monet, C. (1890). *Haystacks, midday* [Painting]. National Gallery of Australia, Canberra. Retrieved from http://artsearch.nga.gov.au/ Detail-LRG.cfm?IRN=29073&View=LRG
Liner notes	The American jazz trombonist, bandleader and composer Jack Teagarden (Weiner, 1995)…	Weiner, D. J. (1995). [Liner notes]. J. Teagarden (Composer), *Big 'T' jump* [CD]. USA: Jass Records.
Score	Craig Scott is one of Australia's leading bassists (Scott, 2013)	Scott, C. (2013). *C minor waltz: For jazz quintet* [Score]. Sydney, Australia: Craig Scott
Streamed music	An analysis of the jazz piano style of "What's Your Story Morning Glory" (Williams, 1978, track 8) reveals…	Williams, M. L. (1978). What's your story morning glory. On *Mary Lou Williams: Solo recital, Montreux Jazz Festival* [CD]. Fantasy. Retrieved from Naxos Music Library Jazz.
Interview – on radio	In a recent interview with the Prime Minister (Mitchell, 2009)…	Mitchell, N. (Presenter). (2009, October 16). Interview with the Prime Minister, Kevin Rudd. In *Mornings with Neil Mitchell* [Radio broadcast]. Melbourne, Australia: Radio 3AW.
Interview – on television	He demonstrated his professionalism and sensitivity in an interview with Raelene Boyle (Denton, 2006) and…	Denton A. (Producer and Interviewer). (2006, September 25). Interview with Raelene Boyle. In *Enough Rope with Andrew Denton.* [Television broadcast]. Sydney, Australia: Australian Broadcasting Corporation.
Motion picture (movie)	Jackson and Pyke (2003) provide evidence that belief in a world…	Jackson, P. (Director), & Pyke, S. (Producer). (2003). *The lord of the rings: The return of the king* [Motion picture]. New Zealand: Imagine Films. ***Note:*** Give the country where the movie was made – not the city.

	IN-TEXT REFERENCE	REFERENCE LIST
Podcast (audio)	Listening to the news on my MP3 player (Nolan, 2007) was a new experience and I decided…	Nolan, T. (Presenter). (2007, April 28). *AM: News & current affairs* [Audio podcast]. Retrieved from http://abc.net.au/news/subscribe/amrss.sml
Radio program – broadcast	When discussing how people write about music, Koval (2009)…	Koval, R. (Presenter). (2009, November 19). *The Book Show* [Radio broadcast]. Melbourne, Australia: ABC Radio National.
Radio program – transcript	The views of the internationally renowned author and public speaker, De Bono, prompted me to follow up one of the interviews (Mascall, 2005) which…	Mascall, S. (Reporter). (2005, February 14). Are we hardwired for creativity? In *Innovations* [Radio program] [Transcript]. Melbourne, Australia: ABC Radio Australia. Retrieved from http://www.abc.net.au/ra/innovations/stories/s1302318.htm
Speech – online	In her ANZAC Day speech (Clark, 2007), the Prime Minister of New Zealand referred to…	Clark, H. (2007, April 25). *Prime Minister's 2007 ANZAC Day message* [Transcript]. Retrieved from http://www.anzac.govt.nz
Television advertisement	The problems of teenage anxiety were graphically captured (Beyondblue, 2009)…	Beyondblue (Producer). (2009, November 29). *Beyondblue: Anxiety* [Television advertisement]. Canberra, Australia: WIN TV.
Television program – broadcast	Examining future plans for Canberra's city area (Kimball, 2009)…	Kimball, C. (Presenter). (2009, September 4). *Stateline* [Television broadcast]. Canberra, Australia: ABC TV. ***Note:*** Always check the television station's website and use the transcript, if one is available, for direct quotes.
Television program – transcript	Cyclones often affect Australia, especially in the north (McLaughlin, 2004) and it is worthwhile…	McLaughlin, M. (Presenter). (2004, November 7). Cyclone Tracy. In *Rewind* [Television program] [Transcript]. Sydney, Australia: ABC TV. Retrieved from http://www.abc.net.au/tv/rewind/txt/s1233697.htm

	IN-TEXT REFERENCE	REFERENCE LIST
THESIS OR DISSERTATION		
Thesis or Dissertation – print	Nurses working in an acute care environment tend to experience a high degree of workplace conflict (Duddle, 2009).	Duddle, M. (2009). *Intraprofessional relations in nursing: A case study* (Unpublished doctoral thesis), University of Sydney, Australia.
Thesis or Dissertation – retrieved from a database	The field of engineering has largely developed around the positivist philosophical position (Hector, 2008).	Hector, D. C. A. (2008). *Towards a new philosophy of engineering: Structuring the complex problems from the sustainability discourse* (Doctoral thesis). Available from Australasian Digital Theses database. (Record No. 185877) ***Note:*** End the reference with the unique number or identifier assigned to the thesis/dissertation.
Thesis or Dissertation – retrieved from the web	Lacey (2011) differentiates between instrumental violence and violence inflicting injury for its own sake.	Lacey, D. (2011). *The role of humiliation in collective political violence* (Masters thesis, University of Sydney, Australia). Retrieved from http://hdl.handle.net/2123/7128
UNIVERSITY PROVIDED STUDY MATERIALS		
Lecture / tutorial notes, etc. – online	Septicaemia is one of many infections commonly acquired in hospitals (Maw, 2010) …	Maw, M. (2010). *NURS5082 Developing nursing practice, lecture 2, week 1: Healthcare-associated infections and their prevention* [Lecture PowerPoint slides]. Retrieved from http://learn-on-line.ce.usyd.edu.au/
SOCIAL MEDIA		
Facebook update List the author's name as it is written (including nicknames).	$52 million will be provided to deploy Australian civilian troops (Rudd, 2009)	Rudd, K. (2009, October 24). Australian civilian corps to help in crises [Facebook update]. Retrieved from http://www. facebook.com/note.php?note_id=200124043571&ref=mf
Blog post - List the author's name as it is used in the posting (including nicknames). - For a blog comment, use 'Blog comment' instead of 'Blog post' and include the exact title (including 'Re:' if used)	The plight of the flapper skate was recently highlighted (Keim, 2009)…	Keim, B. (2009, November 18). ID error leaves fish at edge of extinction [Blog post]. Retrieved from http://www.wired. com/ wiredscience/2009/11/extinction-error/

	IN-TEXT REFERENCE	REFERENCE LIST
Video blog post (eg YouTube)	The Prime Minister, speaking about Australia's role in the G20 forum (Rudd, 2009)…	Rudd, K. (2009, September 29). Update on new G20 arrangements [Video file]. Retrieved from http://www.youtube.com/watch?v=i8IdJ-0S5rs
Twitter tweet If the author uses their name as their Twitter 'handle', do not alter its format to follow the convention of 'Family name, Initial(s).'	President Obama announced the launch of the American Graduation Initiative (BarackObama, 2009).	BarackObama. (2009, July 15). Launched American Graduation Initiative to help additional 5 mill. Americans graduate college by 2020: http://bit.ly/gcTX7 [Twitter post]. Retrieved from http://twitter.com/BarackObama/status/2651151366 ***Note:*** This reference would be filed under 'B', not 'O'
Discussion group, list, etc. – online	There are strongly held views about knowledge management (Weidner, 2007) and from personal experience…	Weidner, D. (2007, June 11). KM reducing in popularity [Discussion list message]. Retrieved from http://actkm.org/mailman/listinfo/actkm_actkm.org
Wiki Include the date retrieved, as the information is likely to change in these sources.	The role of media corporations in the media literacy movement is discussed ("Great debates in media literacy", n.d.)	Great debates in media literacy: Theory and practice of media literacy. (n.d.). In *Wikiversity.* Retrieved October 27, 2009, from http://en.wikiversity.org/wiki/Great_Debates_in_Media_Literacy

PERSONAL COMMUNICATION AND EMAIL

Personal communication Includes private letters, memos, email, telephone conversations, personal interviews, etc. These are cited in-text only, not in the Reference List.	J. Francis (personal communication, August 6, 2007) was able to confirm that the floods had not reached their area.	**Not included in Reference List. Cite in-text only.**
Email – NEVER cite addresses without permission of the owner of the address	Ms Coleman (personal communication, July 11, 2007) provided details in an email and we acted on that information.	**Not included in Reference List. Treat as personal communication and cite in-text only.**

	IN-TEXT REFERENCE	REFERENCE LIST
WEB RESOURCES		
Web document – author or sponsor given, dated ***Note:*** A web document is a file (e.g. a Word or PDF file) found on the Web. Often there are links to Web documents from Web pages. A Web document is not the same as a web page.	An RBA paper (Simon, Smith, & West, 2009) found that participation in a loyalty program and access to an interest-free period…	Simon, J., Smith, K., & West, T. (2009). *Price incentives and consumer payment behaviour.* Retrieved from the Reserve Bank of Australia website: http://www.rba.gov.au/ PublicationsAndResearch/RDP/RDP2009-04.html
Web document – author or sponsor given but not dated	The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is designing several energy-efficient electric machines to reduce greenhouse gas emissions (CSIRO, n.d.).	Commonwealth Scientific and Industrial Research Organisation. (n.d.). *Reducing Australia's greenhouse emissions factsheet.* Retrieved from http://www.csiro.au/ resources/ps282.html
Web page with no page numbers *Include in in-text references:* - If directly quoting, a paragraph number with the abbreviation 'para' (count paragraphs if numbers are not visible) ***OR*** - A section heading and paragraph number (e.g. Introduction, para. 3). A long section heading may be shortened and enclosed in double quotation marks. ***Note:*** Because Web pages can be updated, you must include the date on which you accessed the source.	Usually the author or creator of a work is the copyright owner (University of Sydney, 2010). When directly quoting a section of a webpage, you will need to include more information: (University of Sydney, 2010, "Who owns copyright?", para. 1). ***Note:*** The heading of the section was "Who owns copyright?"	University of Sydney. (2010). *Guide to copyright*. Retrieved March 21, 2011, from http://sydney.edu.au/copyright/students/ coursework.shtml#who

	IN-TEXT REFERENCE	REFERENCE LIST
Web source – no author or sponsor given When there is no author for a source you find on the Web (whether it be a Web document or a Web page), the title moves to the first position of the reference entry. If the title is long, use an abbreviated version of it for in-text citations. Insert double quotation marks around the title ***Note:*** If you were citing the title of a book, periodical, brochure or report, you would use italics rather than double quotation marks.	This vaccine is 6 times more efficient than vaccines previously used to immunise against the condition ("New child vaccine", 2001).	New child vaccine gets funding boost. (2001). Retrieved April 16, 2012, from http://news.ninemsn.com.au/health/story_13178.asp
Website – entire website	The new website of the Department of Education, Employment and Workplace Relations (http://www.deewr.gov.au) includes useful information on current government education policy.	**Not included in Reference list.**

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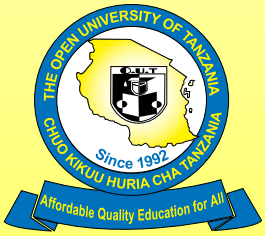

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