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THE RELATIONSHIP BETWEEN SELECTED MARKET ORIENTATION DIMENSIONS AND ORGANIZATIONAL PERFORMANCE WITHIN UNIVERSITIES IN SOUTH AFRICA

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Abstract
The association of market orientation and organisation performance has been the focal point of several studies that confirmed a positive relationship between the constructs. However, there is a lack of evidence in studies examining this issue within universities of technology (UoTs) in South Africa. Hence, the study was undertaken with the main objective of conducting an analysis on the dimensions of MARKOR scale of market orientation in the prediction of university performance within UoTs in South Africa. Both the resource based view theory and the dynamic capacity theory were identified as the foundation of the study. Considering the situational factors and the institutions' environment, a non-probability sampling procedure was chosen. A convenience sample of 507 full-time employed academics within the six UoTs in South Africa, participated in a cross-sectional survey through a self-administered structured questionnaire. The factor analysis procedure resulted in the extraction of three primary dimensions, namely market information generation, market information dissemination and responsiveness. A conceptual research model was tested using confirmatory factor analysis. Through multiple regression analysis, the results show that market information generation, market information dissemination and responsiveness are significant predictors of university performance. The findings contribute to an enhanced comprehension of the dimensions of MARKOR scale towards predicting university performance among UoTs in South Africa. The study provides possible recommendations and extends immensely the existing knowledge among researched concepts when measuring organisational performance.

JEL Classification: M30, M31, M39, M12, M54

Key Words: University performance, Market information generation, Market information dissemination and responsiveness

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1. Introduction

Contrary to the conservative image of the higher education institutions (HEIs) sector globally, universities have begun to show an increasing interest in marketing. The latest developments within the HE sector have encouraged university management to realise the potential of market forces logic in becoming an integral part of the academic world (Hayrimen-Alestalo and Peltola, 2006). This resulted due to restructuring and improvements in technology and society; demands of the labour market are continually changing, which is why the South African HE environment has been changing (Janse van Rensburg et.al , 2017). This transformation of the HE sector places an excessive amount of pressure on universities, as it is necessary for them to be effective and efficient in their day-to-day operations.

The current research is the first to study the relationship between components of market orientation and university performance within Universities of Technology (UoTs) in South Africa. UoTs in South Africa are the focus of the study, notwithstanding the fact that, characteristic of a business operating environment, they have also undergone radical transformation over the past decades. In the process, UoTs have learned a great deal about operating in a business-like manner and, in fact, are businesses in the ordinary sense, as they have to compete for resources with other universities. In that vein, UoTs provide a good pedestal for this study, as they, increasingly, are becoming an economy of knowledge in which information is used to improve productivity and seek competitive advantage.

The concept of marketing was rehabilitated under a new name: market orientation (Van Raaij, 2001). Na,et.al (2019) refer to market orientation as a management thought that overcomes theoretical limitations of marketing concepts .Invariably, the concept of market orientation has been approached from two perspectives: market orientation as behavioral (Kohli and Jaworski, 1990) and market orientation as cultural (Narver and Slater, 1990). These initial efforts by Kohli and Jaworski (1990) and Narver and Slater (1990) began a concentrated effort that led to the formation of a specialised literature that has developed around this new perspective in the marketing field. Subsequently, the present market orientation literature is based on the research work of Narver and Slater (1990) as well as of Kohli and Jarworski (1990), which in essence imposed a new perspective on the marketing concept.

The association of market orientation and organisation performance has been the focal point of several studies that confirmed a positive relationship between the construct. As a significant contributor to a firm's long-term success, market orientation has expanded as a major antecedent of organisational performance (Gheysari, et.al 2012). Years of research have concluded that market-oriented companies perform better than companies that are less market oriented. In fact, much of the research investigating the market orientation concept suggests that firms that have better market knowledge and are often more creative and innovative overall, which should lead to better overall long-term performance (Pleshko and Herens, 2000). To this end, a market orientation philosophy helps firms adopt the most effective and efficient activities for creating superior value for buyers and thus continuous superior performance for the business (Narver and Slater 1990).

In this paper, market orientation is defined as the ability of the organisation to generate, disseminate and use superior information about customers and competitors (Kohli and Jaworski, 1990). From this perspective, MARKOR scales have been developed to measure market orientation and tested with positive results (Jaworski and Kohli, 1993; Kohli, et.al, 1993). In addition, these measurement scales focused on the firm's activities and behaviours regarding customer needs, competitive information, market intelligence and the sharing of such knowledge across organisational functions (Siguaw et al., 1998). In Kohli and Jaworski's (1990) works, the concept of market orientation is used as the implementation of the marketing concept within the organisation. Thus, an organisation's success will depend largely on its ability to continuously generate intelligence about its customers' need and disseminate the information generated with a view to responding satisfactorily to the customers' needs (Hamadu,et al. 2011). This study adopts the dimensions of Kohli and Jaworski (1990) MARKOR scale (i.e. market information generation, market information dissemination and responsiveness) to analyse the potential impact of market orientation on university performance in South Africa from an academic stance.

2. Problem statement

Although the effect of market orientation on firms' performance has been widely recognised, few studies explored the relationship between market orientation and university performance. Thus, there is a definite paucity in studies examining this issue, especially within UoTs in South Africa. Research pertaining to market orientation in HEIs in South Africa seems to be deficient, therefore, an empirical gap in research exists within a South African university context to explore the influencing MARKOR dimensions that impact on university performance. In view of this lack of research evidence in the field of market orientation studies within HEIs, a study identifying the components of market orientation adoption is vital in a South African HEI context. Furthermore, this lack of published knowledge in South Africa may suggest that the impact of market orientation on university performance has been overlooked.

The aim of this paper is to fill part of the gap and open a window of research to understand better the processes and factors involved in the operationalisation of market orientation. To the researcher's knowledge, no previous study has explored the applicability of the MARKOR scale within the HEI sphere, particularly in South Africa. This study attempts to add to the body of previous research by exploring the perceptions of academics on the predictive value of MARKOR scale dimensions on university performance. It is also interesting to examine the extent to which MARKOR dimensions can influence performance of UoTs

3. Literature review

3.1 Theoretical framework

Whilst market orientation has been a subject for many organisations, various theories, underlying its existence and prominence within contemporary marketing have been reported in the literature. Within the domain of market orientation,

universities are also subjected to competitive advantages and accompanying threats. Hence, the resource-based theory (RBT) may also come into into play among universities, taking into account the presence of private, public advantaged and disadvantaged education institutions, institutions especially with the private HE domain in South Africa. Hunt and Morgan (1995) suggest that market-oriented institutions can achieve a position of competitive advantage and long-run performance and sustainability through adopting RBT. Kuosmanen and Kuosmanen (2009:235) affirm that "[s]ustainability is nowadays generally accepted as one of the key success factors in the long-term business strategy of the firm".

Furthermore, of recent, theorists have made a number of inroads in understanding market orientation, which has been collectively labelled dynamic capabilities theory (DCT). DCT emphasises that marketplaces are dynamic, rather than simple in terms of heterogeneity with regard to institutions' resource endowments (Morgan, et al. 2009). The DCT theory explores the capabilities by which an institution's resources are acquired and deployed in ways that match the firm's market environment, which explains inter-institution performance variances (Eisenhardt and Martin, 2000; Makadok,2001).

Against this backdrop, the adoption of both theories as the theoretical bedrock may be useful in addressing market orientation and university performance among UoTs within a South African context.

3.2 MARKOR dimensions

According to Kohli and Jaworski, (1990), the behavioural perspective is concerned with the implementation of the marketing concept and concentrates on three organisational activities, namely generating market intelligence, the dissemination and transfer of market intelligence throughout the firm and an organisation's degree of responsiveness to market intelligence. This conceptualisation of the market orientation construct suggests a clear focus on information-related behaviour (Helfert,et.al,2001; Kirca,et al.2005; Ng,2016; Glaveli and Georgas, 2018).

3.2.1 Market intelligence generation

Market intelligence generation is the starting point of a market-oriented university. Market intelligence generation is a broader concept than customers' verbalised needs and preferences and includes:

- gathering and analysing information regarding customer's current and future needs,
- monitoring and analysing exogenous factors (such as competition, government, technology and other environmental forces), and
- gathering and monitoring of market intelligence through formal and informal means (Kohli and Jaworski, 1990; Zebal, 2003).

3.2.2 Market intelligence dissemination

For an institution to adapt to market needs, market intelligence generated must be communicated and disseminated to relevant departments and individuals in the institution (Harris and Ogbonna, 1999). To this end, the market intelligence dissemination process entails two distinct aspects, namely:

- sharing existing and anticipated information throughout the organisation, and
- ensuring effective use of disseminated information, which is a two-way process comprising of lateral and horizontal communication (Kohli and Jaworski, 1990).

3.2.3 Responsiveness

The last dimension of the MARKOR framework proposed by Kohli and Jaworski (1990) emphasises the responsiveness of the firms to the market intelligence generated and disseminated. Responsiveness to market intelligence refers to the ability of the organisation to respond to generated and disseminated market information and is divided into two types of activities, namely response design (such as using market intelligence to develop plans) and plan execution (Harris and Ogbonna, 1999).

3.2.4 University performance

Performance measurement compares actual performance with what has been planned and provides feedback so that future planning could be much more accurate (McNair,et al. 1990). The feedback emanating from performance measures can then ensure that the vision from the highest level of management is converted sufficiently into strategies and objectives (Naidoo,2002). Consequently, employees are better able to deal with strategies and objectives and feedback for planning is enhanced and the whole institution becomes more focused and market-oriented (Khuwaja,et.al, 2017). Although public HEIs in South Africa enjoy considerable statutory autonomy, they are required to provide an account to the government through the Minister of Education according to accepted practice (RSA 2007). In addition, HEIs in South Africa are obliged to submit annual reports on their performance while meeting the expectations of a range of stakeholders in an increasingly turbulent market environment. The Regulations for Annual Reporting by HEIs published in 2007 under the Higher Education Act, 2007, guided this process and complied with the King 111 Report on Governance in respect of the framework for reporting.

4. Conceptual framework and hypotheses

A conceptual framework is suggested where the three MARKOR dimensions are treated as predictors (independent variables) and university performance as an outcome (dependent variable). Figure 1 shows the conceptual model depicting the conceptual framework and its associated relationships.

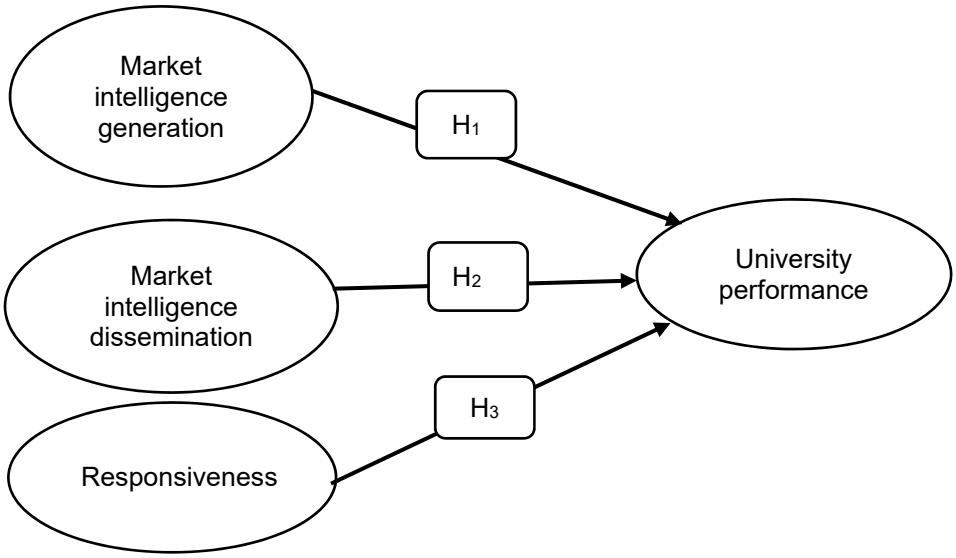

Figure 1: Conceptual Framework

Arising from the conceptual framework, the following hypotheses were formulated:

H_1: There is a positive relationship between market intelligence generation and university performance.
H_2: There is a positive relationship between market intelligence dissemination and university performance.
H_3: There is a positive relationship between responsiveness and university performance.

5. Methodology and design of research

The research design of this study was a basic applied research approach seeking predictive relationships within the studied variables. The methodology of this research is embedded within a post-positivism and applied quantitative research paradigm adopting a cross-sectional survey. The quantitative approach is viewed as systematic and structured, aimed at obtaining information from respondents in a direct, open manner (Du Plessis and Rousseau, 2007).

5.1 Population, sample and participant

The target population was restricted to academics who were selected conveniently based on availability. In order to achieve the stated study purpose, a non-probability convenience sampling procedure was pursued to recruit full-time academics from the six participating UoTs in South Africa.

5.2 Instrumentation and data collection

Based on the research undertaken by Zebal (2003), MARKOR instrument was modified to fit the context contained by the three main dimensions to capture market orientation levels. University performance was measured by 6 context specific items which were identified from previous studies by Ma and Todorovic (2011).The instruments were based on five-point Likert scales with one denoting strongly disagree to five denoting strongly agree. Further, demographic data were included in the survey (gender, age of academics etc.).

The researcher distributed 540 questionnaires with the aid of lead staff members within the six participating institutions to obtain maximum participation of respondents for data collection. Of these distributed questionnaires, only 507 questionnaires were useful in the final analysis of the results after eliminating 33 questionnaires that were not fully completed.

6. Results

6.1. Sample composition

An analysis of the demographic profile of respondents shows that there were more male academics (57%; n=287) in the sample compared to female academics (43%; n=220). In terms of the age groups, the largest group (34%; n=172) was composed of respondents whose ages ranged from 30 to 39 years, followed by (32%; n=160) respondents whose ages ranged from 40 to 49 years. This was followed by (16%, n=81) respondents whose ages ranged from 50 to 59, less than 30 years of age (13%; n=66) and, lastly, respondents who were 60 years and above (5%; n=28).

6.2. Pre-analysis Tests

Coefficient alpha and composite reliabilities (CR) were computed to test the reliability of the measurement scales. Coefficient values and composite reliabilities >0.70 are considered sufficient to conclude internal consistency of the proposed dimensions (Nunnally and Bernstein, 1994). Table 3 shows that both the Cronbach alpha and CR values for each construct met the recommended threshold value of >0.70 and were found to be reliable.

Moreover, validity assessments were undertaken. Content validity was ascertained through a thorough literature review and pilot testing of the measuring instrument prior to the main survey with 41 marketing academics who did not form part of the main survey, which is consistent with Malhotra (2010).

All the AVE estimates in Table 1 are higher than the threshold of 0.50 and thus indicate sufficient accuracy in contributing to construct validity for the various construct measures as suggested by Pallant (2010).

Anderson and Gerbing (1988) recommend factor loadings for convergent validity should be >0.5. As indicated in Table 1, the factor loadings are all above the recommended value, ranging from 0.674 to 0.845. This indicates an acceptable individual item convergence in the validity of all scale items.

Discriminant validity was assessed by comparing the average variance extracted (AVE) values for each construct with the squared correlations between the respective constructs. Since none of the shared variances exceeded the AVE values (Table 3) discriminant validity was confirmed (Yoshida and James, 2010).

Table 1: Reliability and accuracy statistics

Research construct		Cronbach's test		CR	AVE	Shared variance (SV)	Factor loadings
		Item-total	α Value				
Market intelligence dissemination (MID)	MID_1	.740	.890	.89	.54	.34	.768
	MID_2	.749					.722
	MID_3	.742					.717
	MID_4	.731					.693
	MID_5	.697					.749
	MID_6	.770					.757
	MID_7	.776					.723
Market intelligence generation (MIG)	MIG_1	.621	.803	.81	.51	.31	.765
	MIG_2	.759					.681
	MIG_3	.842					.662
	MIG_4	.801					.745
Responsiveness (RES)	RES_1	.695	.806	.83	.56	.34	.729
	RES_2	.701					.802
	RES_3	.691					.723
University performance (UP)	UNP_1	.741	.90	.91	.62	.34	.791
	UNP_2	.796					.835
	UNP_3	.703					.759
	UNP_4	.796					.845
	UNP_5	.764					.805
	UNP_6	.628					.674

6.3. Exploratory factor analysis

Exploratory factor analysis (EFA) was initially conducted to affirm the adoption of the factor structure of the measuring instrument. The individual results for the dimensions of the MARKOR instruments are reported in Table 2.

Table 2: Results for Exploratory Factor Analysis of MARKOR

Constructs	Bartlett's tests of sphericity[1] Sig	KMO[2] (sampling adequacy)	% of variance[3]	Eigen-values[4]	No of items
Market orientation dimensions(MARKOR)					
Market intelligence dissemination	.000	0.889	64.05	3.941	7
Market intelligence generation				2.661	4
Responsiveness				2.364	3

6.4. Confirmatory factor analysis

Building from the EFA, confirmatory factor analysis (CFA) was conducted using the AMOS programme to check whether the model satisfactorily fits the data. The following goodness-of-fit measures were considered as a guide to an acceptable model fit: chi-square/degree of freedom (< 3.0), incremental fit index (IFI) >0.90, Tucker- Lewis index (TLI) >0.90, comparative fit index (CFI) >0.90, goodness of fit index (GFI)>0.90 and standard root mean square error of approximation (RMSEA) <0.08 (Hu and Bentler, 1999). The overall fit of the model shown in Table 3 was acceptable as it met the required threshold for fit measures.

Table 3: Goodness-of-fit Statistics

Fit indices	**CFA**
Chi square/degree of freedom CMIN 382.344(157) df at 0.000	2.435
Incremental fit index (IFI)	0.963
Tucker- Lewis index (TLI)	0.955
Comparative fit index (CFI)	0.962
Goodness of fit index (GFI**)**	0.929
Root mean square error of approximation **(**RMSEA)	0.053

6.5. Correlation coefficients

Spearman's non-parametric correlations between the constructs were undertaken and the results are reported in Table 4. Moderate to strong correlations were found between MID and MIG (r=.557; p<0.01), MID and RES (r=.566; p<0.01), MID and UP (r=.585; p<0.01), MIG and RES (r=.518; p<0.01), MIG and UP (r=.489; p<0.01) and between RES and UP (r=.584; p<0.01).

Table 4: Correlations between Constructs

Construct	MID	MIG	RES	UP	MEAN	STD
MID	1.000	.557**	.566**	.585**	3.59	0.84
MIG	.557**	1.00	.518**	.489**	3.61	0.83
RES	.566**	.518**	1.00	.584**	3.46	0.86
UP	.585**	.489**	.584**	1.00	4.52	1.39

**Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed). ** *Correlation is significant at the 0.01 level (2-tailed).*

6.6. Regression analysis

Furthermore, multiple regression analysis was used to model the causal effect and estimate the marginal contribution of market intelligence generation, market intelligence dissemination and responsiveness on the performance of the UoTs in South Africa. To this end, collinearity statistics, namely the variance inflation factor (VIF) and tolerance values were computed in order to assess multicollinearity in the data set. Variables that have VIF values >10 and tolerance values <0.10 indicate multicollinearity problems (Pallant, 2010). As shown in Table 5, none of the independent variables had VIF values >10 and tolerance value <0.10, confirming the absence of multicollinearity in the data.

To examine the influence of market orientation dimensions on university performance levels, regression analysis was performed with university performance as the dependent variable (outcome) and MIG, MID and RES as independent variables (predictors). The overall regression was significant ($F = 28.16$; $p < .001$; $p<.05$). All three variables (MIG, MID and RES) were significant in predicting university performance. Table 5 lists the standardised coefficients of each independent variable. The R-square value indicated that approximately 45 percent of the variance in university performance levels with market orientation was primarily due to the academic perceptions of the MIG, MID and RES provided by the university.

Table 5: Regression Analysis: MARKOR with University Performance

Independent variables: MARKOR dimensions. Dependent variable: University performance	Unstandardised coefficients		Standardised coefficients	t-value	Sig	Collinearity statistics	
	B	Std. error	Beta			Tol	VIF
MIG H1	.139	.044	.139	3.330	.001*	.630	1.59
MID H2	.321	.045	.321	7.419	.000**	.584	1.71
RES H3	.333	.042	.330	7.846	.000**	.620	1.61

*R= .670. R^2=.449. Adjusted R^2 =.445. F=136.412. * Significant at p<0.05*
*** Significant at p<0.01. Tol=tolerance value. VIF = Variance inflation factor.*

7. Discussion

With respect to descriptive statistics, Table 4 indicates that all mean scores returned for all the constructs were above the score of three on the Likert scale, suggesting that academics recognise the significance of these constructs within their institution. In addition, the standard deviations are also very similar across the constructs relative to the means. This finding supports the view of Asomaning and Abdulai (2015) that these results can only be made possible if the institution was primarily involved in generating and gathering information about their existing and prospective customers and incorporate this information in developing marketing and production strategies.

Market intelligence generation dimension, (eigenvalue=1.312), consists of four variables accounting for 3.645 percent of the total variance. Consistent with hypothesis one (H1), results computed and shown in Table 5 (β =.139; t = 3.330; p < 0.001) indicate that there is a significant positive relationship between market intelligence generation and university performance. While this dimension relates to how organisations acquire market information in order to share and respond, it is expressed in previous research as a good idea to collect information from customers (Narver and Slater 1990; Ruekert 1992). Likewise, Hou (2008), also attest that if information is collected at university level, it is likely that novelty and meaningfulness of new value options will align with stakeholders' expectations.

Market intelligence dissemination dimension (eigenvalue=15.829) consists of 11 items contributing a percentage variance of 44.053 of the total variances. Hypothesis 2 postulated a positive relationship between market intelligence dissemination and university performance. The standard coefficients shown in Table 5 (β =.321; t = 7.419; p >0.001) confirmed the H2 and thus provided an affirmative response to Abuzid and Abbas (2017) assertion that improved university performance is a consequence of higher levels of market intelligence dissemination.

The sharing of information by departments as well as among various departments results in development of activities to meet customer needs (Felgueira and Rodrigues, 2015). Deshpande et al. (1993) assert that strengthening the inter-cooperation of different departments leads to satisfactorily meeting the continuing needs and wants of customers. Other researchers, such as Hou (2008), propose that such an intervention/ approach will further foster an open decision-making process to gather a wide range of expertise and experience.

Lastly, the responsiveness to market intelligence dimension (eigenvalue = 2.364) comprises three items accounting for 16.888 percentage of the total variance and relates to organisations' actions to respond to their markets (Akonkwa, 2013). As can be seen from Table 5, the results computed (β =.330; t= 7.846; p >0.001) provide evidence to support the third hypothesis, which posited that there would be a positive relationship between responsiveness and university performance. Responding to changes taking place in HEIs will have an effect on generating further information (Abidemi,et al.,2017). Responsiveness also requires the application of marketing tools and techniques to elicit favourable market response (Mokoena, 2015).

The study contributes a new direction in the research on market orientation by opening up a debate on the importance of market orientation practices in the development and improvement of university performance despite inherent barriers in higher education institutions

8. Conclusion and recommendations

This study provides a theoretical and practical basis to extend research on further application of market orientation in academia, especially in cases where academics find their institutions to be unrelated to performance. It further confirms that market orientation, through its three behavioural components measured through the MARKOR scale, significantly impacts university performance based on the aforementioned in the study. The academics' opinions suggest that information generation, dissemination and responsiveness to intelligence are critical for the superior performance of UoTs in South Africa. To deal with the new environmental uncertainty, a university needs to develop a culture that is relevant and responsive to the external environment as well. So far, there has been an implicit assumption that market orientation is appropriate in the establishment of superior university performance**.** The three MARKOR dimensions, which showed satisfactory reliability could be used as an analytical tool for the prediction of the university performance levels' quality. These dimensions could be used to identify problem areas and provide guidance for future improvement of university performances. Overall, these dimensions of MARKOR may assist university managers in preparing strategies for improvement of their university performance. Furthermore, to empower management and staff with market intelligence, universities must have systems in place for intelligence generation and dissemination and distribution of this information. The task of top management, in this regard, is to install the market-oriented culture through strategy making and implementation at all levels.

The study was confined to full-time academics and responses were based on individual perceptions and cross-sectional measures leading to a degree of bias in the responses obtained. Therefore, the sample warrants caution in respect of generalising the results beyond the population investigated. It is suggested that academic and non-academics' perceptions towards market orientation levels and university performance could be obtained periodically in order to find ways to improve the implementation levels of marketing orientation. Further research in the area of market orientation and university performance should be undertaken over time, perhaps a longitudinal study across the academics and non-academics within the entire university. In addition, further tests of the psychometric properties of the scale could be verified with larger sample sizes. Another limitation concerns the use of a single method of data collection. All the data in the study were collected quantitatively, which led to the common method bias inherent to quantitative methods. Thus, it is recommended that future studies could try to incorporate a qualitative design to mitigate against this bias.

References

Abidemi, T.B., Halim, F.B. & Alshuabi, A.I. (2017). Service marketing mix and organizational performance: a proposed framework on the moderating effect of technological turbulence. European Academic Research*,* V(2), 1508-1525.

Abuzid, H.F.T. & Abbas, M. (2017) Banks performance and impact of market orientation strategy: Do employee satisfaction and customer loyalty augment this relationship? International Review of Management and Marketing, 7(2), 60-66.

Akonkwa, D.B.M. (2013). Beyond market orientation: an operationalisation of stakeholder orientation in higher education. African Journal of Marketing Management, 5(3), 68-81,

Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. Psychology Bulletin, 1(3), 411-423.

Asomaning, R. & Abdulai, A. (2015). An empirical evidence of the market orientation–market performance relationship in Ghanaian small businesses. Educational Research International, 4(2), 69-86.

Deshpande R., Farley J.U. & Webster F.E. Jr. (1993). Corporate culture, customer orientation, and innovativeness. Journal of Marketing, 57(1), 23-37.

Du Plessis, P.J. & Rousseau, G.G. (2007). Buyer behaviour: understanding consumer psychology and marketing. Cape Town: Oxford University Press.

Eisenhardt, K,M. & Martin, J.A. (2000). Dynamic capabilities: What are they? Strategic Management Journal, 21, 1105-1121.

Felgueira, T. & Rodrigues, R.G. (2015). Market orientation of teachers and researchers in higher education institutions: a new approach procedia. Social and Behavioral Sciences 174, 3017-3024

Gheysari, H., Rasli, A., Roghanian, P., Norhalim, N. (2012). A review on the market orientation evolution. Procedia. Social and Behavioral Sciences, 40, 542-549.

Glaveli, N. & Geormas, K. (2018). Doing well and doing good: exploring how strategic and market orientation impacts social enterprise performance. Interrnational Juornal of Entrepreneurial Behaviour & Research, 24,147-170.

Hamadu, D., Obaji, R. & Oghojafor, B. (2011). Intelligence information generation, dissemination, and responsiveness in the performance of insurance business in Nigeria. Journal of Marketing Development and Competitiveness 5(7), 53-62.

Harris, L.C. & Ogbonna, E. (1999). Developing a market-oriented culture: a critical evaluation. Journal of Management Studies, 36(2), 176-196

Hayrimen-Alestalo, M. & Peltola, U. (2006). The problem of a market-oriented university. Higher Education 52(2), 251-281.

Pleshko, L.P., Herens, R.A. (2000). Customer focus or competitor: a financial services example. Journal of Professional Services Marketing, 20(2), 19-32.

Helfert, G., Ritter, T., Walter, A. (2001). How Does market orientation Affect Business relationships? Paper submitted, and accepted, to the 17th IMP Conference, September 9-11, Oslo, 1-26.

Hou S.L. (2008). Issues and procedures in adopting a structural equation modeling techniques. Journal of Applied Quantitative Methods, 3(1), 76-83.

Hu, L., Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives structural equation modeling. A Multidisciplinary Journal 6(1), 1-55.

Hunt, S.D. & Morgan, R.M. (1995). The competitive advantage theory of competition. Journal of Marketing, 5992:1-15.

Janse van Rensburg, C., Rothmann, S.I. & Diedericks, E. (2017). Person environment fit, flourishing and intention to leave in universities of technology in South Africa. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 43(0), 1422-1431

Jaworski, B.J. ,Kohli, A.K. (1993). Marketing orientation: antecedents and consequences. Journal of Marketing, 57(July 1993):53-70.

Khuwaja, F.M., Shari,H.B. & Bakar, L.J.A. (2017). Market orientation; an important consideration for for higher education of Pakistan. International Journal of Academic Research in Business and Social Sciences,7,419-436.

Kirca, A.H., Jayachandran, S. & Bearden, W.O. (2005). Market orientation: a meta-analytic review and assessment of its antecedents and impact on performance. Journal of Marketing, 69 (April 2005), 24–41.

Kohli, A.K., Jaworski, B.J. (1990). Market orientation: the construct, research propositions & managerial implications. The Journal of Marketing, 54(2), 1-18.

Kohli, A.K., Jaworski B.J. & Kumar A. (1993). MARKOR: A measure of market orientation. Journal of Marketing Research, 30(4), 467-477.

Kuosmanen, T., Kuosmanen, N. (2009). How not to measure sustainable value (and how one might*). Ecological Economics 69(2):235-243*.

Ma, J., Todorovic, Z. (2011). Making university relevant: MO as a dynamic capability within institutions of higher learning. Academy of Marketing Studies Journal, 15(2), 1-15

Makadok, R. (2001). Towards a synthesis of the resource-based and dynamic capability views of rent creation strategic. Management Journal 22(5), 387-401.

Malhotra, N.K. (2010). Marketing research: an applied orientation. New Jersey: Prentice Hall

Na, Y.K., Kang, S. & Jeong,H.Y (2019).The effect of market orientation on performance of sharing economy business . Sustainability, 11(279),1-19.

McNair, C.J., Lynch, R.L., Cross, K.F.(1990). Do financial and non-financial performance measures have to agree? Management Accounting (CIMA), (November 1990):28-36.

Mokoena, B.A. (2015). Marketing of Universities of Technology: examining the relationships between market orientation elements, barriers and university performance. Doctoral Thesis, Vaal University of Technology, South Africa.

Morgan, A.N., Vorhies, D.W. & Mason, C.H. (2009). Marketing orientation, marketing capabilities and firm performance. Strategic Management Journal, 30, 909-920.

Naidoo, P. (2002). An investigation of cost management in tertiary institutions. PhD Thesis. Vista University: Johannesburg.

Narver, J.C. & Slater, S.F. (1990). The effect of a market orientation on business profitability. Journal of Marketing, 54(4), 20-34.

Ng, C.J.W. (2016). Hottest brand, coolest pedagogy: approaches to corporate branding in Singapore's higher education sector. Journal of Marketing for Higher Education Sector. Journal of Marketing for Higher Education, 26,41-63.

Nunnally, J.C., Bernstein, I.H. (1994). Psychometric theory. (3rd edition). New York: McGraw-Hill

Pallant, J. (2010). SPSS Survival manual: a step by step guide to data analysis using SPSS for Windows Third Edition. Open University Press: McGraw-Hill.

Ruekert, R.W. (1992). Developing a market orientation: an organizational strategy perspective. International Journal of Research in Marketing, 9(3), 225-45.

Siguaw, J.A., Simpson, P.M., Baker, T.L. (1998). Effects of supplier market orientation on distributor market orientation and the channel relationships. Journal of Marketing 62(July), 99-111

Van Raaij, E.M., (2001). The implementation of a market orientation. Ph.D. Thesis. University of Twente, Twente University Press, Rotterdam, Netherlands.

Yoshida, M., James, J.D. (2010). Customer satisfaction with game and service experiences: antecedents and consequences. Journal of Sport Management, 24, 338-361

Zebal, M.A. (2003). A synthesis model of market orientation for a developing country – the case of Bangladesh. PHD Thesis, Victoria University, Melbourne, Australia.