Journal of Contemporary Management
Volume 15

Buyer-Supplier Relationships and Firm Performance in the Fast Moving Consumer Goods retail industry

WV LOURY-OKOUMBA
Vaal University of Technology
lvandrys@yahoo.com

C MAFINI*
Vaal University of Technology
chengedzaim@vut.ac.za
* corresponding author

Abstract

The fast-moving consumer goods (FMCG) retail industry in South Africa faces unique performance-related challenges that impede its abilities to sustain growth in a competitive and volatile sector. One of the strategic routes identified to improve the overall performance of FMCG retail firms is to develop sound relations with supply chain partners based on engagement, commitment, trust, communication and cooperation. Thus, the present study aimed at investigating the perceived influence of buyer-supplier relationships on firm performance in the FMCG retail industry.

For this quantitative study, six hypotheses were formulated to determine the proposed relationships. A structured questionnaire was used to collect data from 244 supply chain managers and professional employees of 37 FMCG retail firms located in Gauteng province. The analysis of data was conducted through confirmatory factor analysis (CFA) to determine the psychometric properties of measurement scales and structural equation modelling (SEM) to test the six hypotheses stated.

The results revealed that all five predicting constructs (buyer-supplier engagement, commitment, trust, communication and cooperation) exert a significant positive influence on supplier performance, with trust exerting the strongest. Furthermore, supplier performance was found to be a significant mediating construct to the relationship between buyer-supplier relationships and firm performance. The study further concludes that supplier performance is an essential driver of firm performance due to the strong relationship it shares with firm performance. The results of the study are a useful diagnostic tool when examining firm performance related challenges within the FMCG retail industry.

Key phrases

Buyer-supplier relationships; buyer-supplier engagement; buyer-supplier commitment; buyer-supplier trust; buyer-supplier communication; buyer-supplier cooperation; supplier performance and firm performance

1. INTRODUCTION

The growth of the South African economy is driven by various industries that fall within several commercial sectors (Fedderke 2018:177). Amongst these groups of businesses is the fast moving consumer goods (FMCG) retail industry that has been described as a profitable industry that generates high employment, which shows its substantial overall contribution to the country's economy (Agigi, Niemann & Kotze 2016:253; Bruwer 2016:1; David & Govender 2014:153; Siwangaza, Smit, Bruwer & Ukpere 2014:163;). According to a report from PriceWaterhouseCoopers (2012:27), the projected growth of the FMCG retail industry was 14.7 percent for the five years between 2011 and 2016, and billions of rands were expected to be generated within this industry. The same report mentions that it was expected that there would be a significant increase in the number of FMCG retail firms by approximately 20 000 by the year 2020, which signals an exponential growth projection. The term FMCG refers to relatively low-cost products with a fast shelf-turnover rate requiring little by way of consumer purchasing decisions (Seyama 2006:14). They include perishable goods such as processed foods, fresh foods, frozen foods and beverages, as well as determined lifespan products such as dry foods (e.g. coffee and refreshing soft drinks) including cosmetics, toiletries and office supplies (Carter 2014). However, stiff competition remains a major impediment to growth in this industry (Mukumba 2014:19). Also, when combined with inadequate financial investment and capital, managerial expertise and technical know-how, this industry suffers from relatively high mortality (Siwangaza *et al*. 2014:164). As shown by Lekhanya, Olajumoke and Nirmala (2017:10) as much as 70-80 percent of South African FMCG retail firms fail within their first two to three years of operations. Disruptive solutions are therefore needed to address this negative trend and promote the further growth of this industry, to maintain its contribution to the South African economy.

One of the strategies that may be used to spur business growth in the South African FMCG retail industry is effective supply chain management through the cultivation of sound relationships between buying and supplying firms. Supply chain management refers to the design and management of seamless, value-added processes across organisational boundaries to meet the real needs of the end customer (Fawcett, Ellram & Ogden 2014:6). As advocated by Autry and Golicic (2010:87), adopting and developing sound buyer-supplier relationships is essential in the achievement of firm performance objectives and sustaining competitive advantage. This view is supported by Cao and Zhang (2013:1130), who affirmed that meaningful business relationships enhance the performance of both firms and their relative supply chains. This provides a possible strategic route that could be useful in dealing and addressing obstacles such as inadequate financial capitalisation, stiff competition and the lack of managerial skills prevailing in the FMCG retail industry (Siwangaza *et al*. 2014:164). In a study conducted by Ketkar, Kock, Parente and Verville (2012:782) it is reported that buyer-supplier relationships are critical in that they enable business partners to build their collaborative engagements, thereby promoting operational performance in the organisations involved in that partnership. Most of the recent studies (Yeung, Selen, Zhang & Huo 2009:66; Mohanty & Gahan 2012:319; Abosag & Lee 2013:602; Vieira, Paiva, Finger, & Teixeira 2013:263; Ozkan-Tektas 2014:14; Bricci, Fragata & Antunes 2016:173) have examined key aspects of buyer-supplier relationships in isolation, and have focused in particular on engagement, commitment, trust, communication and collaboration. However, there is a paucity of evidence within previous studies, in the academic literature that considered these factors in combination. Furthermore, despite the relevance of international research to the strategic effect of buyer-supplier relationships on firm performance, evidence found in the South African context regarding their potential contribution to the success of the FMCG retail industry is narrow. Still, apart from studies conducted by Mugari (2015:1), and Botes, Niemann and Kotze (2017:183), most of the available research (e.g. Badenhorst-Weiss & Tolmay 2016:1329; Naude, Ambe & Kling 2013:1; Roberts-Lombard, Mpinganjira & Svensson 2017:1) directed to buyer-supplier relationships in South Africa has largely disregarded the FMCG retail industry. The aim of this study, therefore, was to investigate the perceived influence of buyer-supplier relationships on firm performance in the FMCG retail industry in South Africa. This investigation is conducted in terms of engagement, commitment, trust, communication and

cooperation between buyers and suppliers. The study also provides a diagnostic framework (Figure 1), derived from testing hypotheses, that outlines the relation of each construct with the others, and that can serve as a tool to improve firm performance and hence the sustainability of FMCG retail firms.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section discusses academic literature about the constructs of the study and the development of hypotheses.

2.1 Buyer-supplier relationships

Buyer-supplier relationships are an important enabler for firms to achieve their competitive advantage goals (Fossas-Olalla, Minguela-Rata, Esco-Mangas & Sandulli 2013:2; Mohanty & Gahan 2012:319). These relationships can be defined in terms of the extent to which buying and supplying organisations interact collaboratively, with the objective of sharing operational and business knowledge and expertise. Such interaction is regarded as crucial for mutual problem resolution (Henke & Zhang 2010:41; Wu, Choi & Rungtusanatham 2010:117). It enables supply chain members to exchange strategic information openly, which ensures that the right products are transferred across supply chain networks. Of particular importance to FMCG retail firms, successful coordination of buyers' and suppliers' operational activities may contribute to the speed and the quality of goods provided to the market, thereby ensuring that customers' expectations are met (Vieira, Paiva, Finger &Teixeira 2012:267). The present study identified five main components of buyer-supplier relationships (engagement, commitment, trust, communication and cooperation) as proposed antecedent factors of supplier performance that are suggested by several scholars (Boyce, Mano & Kent 2016:1; Mugarura 2010:8; Vieira *et al*. 2012:264), as having a beneficial influence on firm performance. This study presupposes that the performance of the FMCG retail industry in South Africa can be enhanced in line with improvements in buyer-supplier partnerships.

2.2 Buyer-supplier engagement and supplier performance

Buyer-supplier engagement refers to the strong and confident belief between buyers and suppliers that they both share the same value and vision of their relationship (Yucel 2012:47). Such engagement is a key facilitator in building long-term relationships, which

subsequently enhance the effective supply of goods from and to business partners (Shafiq 2015:1; Wong, Lai, Lun & Cheng 2012:7). Further benefits include the fostering information exchange between the parties, which leads to improved operational processes (Abosag & Lee 2013:602; Fossas-Olalla, Minguela-Rata, Lopez-Sanchez & Fernandez-Menendez 2015:1404). A number of scholars such as Khan, Ziauddin, Jam and Ramay (2010:294), and Chinomona and Hove (2015:65) put forward the idea that buyer-supplier engagement has a strong and significant influence on supplier performance because it allows the supplying firm to demonstrate its commitment and dedication in the course of their daily activities. The engagement of firms to achieve customer satisfaction by collaboratively providing quality services and outputs was also identified by Ellinger, Musgrove, Ellinger, Bachrach, Bas and Wang (2013:1128); and Abdolmaleki and Ahmadian (2016:147) as a driver of satisfactory supplier performance. It is therefore hypothesised that:

H_1: Buyer-supplier engagement exerts a positive influence on supplier performance in the FMCG retail industry.

2.3 Buyer-supplier commitment and supplier performance

Buyer-supplier commitment can be defined as the belief that two parties perceive and value their relationship and are thus willing to exercise their utmost devotion to maintaining it (Wong, Lai, Lun & Cheng 2012:7). According to Lumley, Coetzee, Tladinyane and Ferreira (2011:105), and Jokela and Söderman (2017:268) the willingness of buyers and suppliers to commit to their contractual engagement gives firms a platform to perform their activities to meet and attain the goals and objectives set. Moreover, the willingness by firms to commit to their relationships with partners is dependent on their level of satisfaction (Bricci, Fragata & Antunes 2016; Sani 2013:45; Suma & Lesha 2011). This implies that the more satisfied business partners are, the more likely they are to commit to their respective business associations. Still, the commitment of firms to their business partnerships enables them to be dedicated to conducting their daily activities swiftly, which leads to better performance in such areas as consistency of the supply of materials, product development and delivery, and customer satisfaction (Ozkan-Tektas 2014:14; Stites & Michael 2011:57). Kompaso and Sridevi (2010:92) argued that business-to-business (B2B) commitment to their alliance partnerships contributes greatly to enhancing their performance level, in terms of

productivity, profitability and loyalty of their business directions. Based on this review, it is hypothesised that:

H_2: Buyer-supplier commitment exerts a positive influence on supplier performance.

2.4 Buyer-supplier trust and supplier performance

Buyer-supplier trust has been found to be an important component of a firm's performance (Susanty, Bakhtiar, Jie & Muthi 2017:2765). Because of its role in ensuring open exchange and access to information needed in the operations processes, it has been defined as the willingness by a business member to trust openly in the goodwill and commitment of another in performing their contractual obligations (Dyer & Chu 2000:260; Gualandris & Kalchschmidt 2015:3; Stuart, Verville & Taskin 2009:2). It has been further established that buyer-supplier trust is an important trigger for the willingness of firms to engage in collaborative decision-making (Ha, Park & Cho 2010:58; Koh, Fichman & Kraut 2012:888; Susanty *et al*. 2017:2765). Zhang, Viswanathan and Henke (2011:318) described buyer-supplier trust as a cornerstone of any successful business relationship or human interaction, thereby emphasising the strategic role that establishing good business ties with partners plays in contributing to business success. Strong business alliances characterised by a high degree of trust lead to prompt responses by supply chain members (Cingano & Pinott 2016:1; Zhang *et al*. 2011:319). Such relationships are also regarded as a major mediating factor in minimising firms' perceived risk (Jain, Khalil, Johnston & Cheng 2014:312), which in turn allows supplying firms to perform at optimal levels. For Jain *et al*. (2014:315), trust calls for the mutual exchange of resources, which then correlates with better resource maximisation and improves firms' performance. Given these results, the following hypothesis is formulated:

H_3: Buyer-supplier trust exerts a positive influence on supplier performance in the FMCG retail industry.

2.5 Buyer-supplier communication and supplier performance

According to Wang, Pauleen and Zhang (2016:4), buyer-supplier communication refers to the effective exchange of information between customers and business partners, with the purpose of smoothing out their operations processes and establishing long-term relationships. Engaging in sound communication activities with business partners was

described by Pei (2011:106) as an essential activity to improve the efficiency of operation procedures. Communication is a key strategic tool that allows the expansion firms' markets base, by ensuring that customers become aware of organisations' products through the efforts of marketing communication channels (Ceschi, Dorofeeva, & Sartori 2014:211; Michaelidou, Siamagka & Christodoulides 2011:1155; Yan & Dooley 2013:16). This point emphasises the relevance of the suitable exchange of information with business associates in ensuring that operational tasks and duties are adequately carried out. Continuous communication between businesses plays a critical role in firms' capabilities to consistently track and trace the movement of goods transported across supply chain networks (Wang *et al.,* 2016:6). It thereby improves the reliability and responsiveness of on-time supply of products, which therefore enhances the overall productivity of operations (Rai, Pavlou, Im & Du 2012:238). Based on these views, it is hypothesised that:

H_4: Buyer-supplier communication exerts a positive influence on supplier performance in the FMCG retail industry.

2.6 Buyer-supplier cooperation and supplier performance

Cao, Vonderembse, Zhang and Ragu-Nathan (2010:6617) refer to buyer-supplier cooperation as firms' ability to collaboratively share information, resources and knowledge in the combined their objective to improve operational performance. Businesses striving for cooperative relations with business counterparts have sustainable competitive advantages through their capabilities to understand consumers/customers' requirements and expectations and combining their resources to meet delivery schedules (Carton & Cummings 2012:442; Wu, Chuang & Hsu 2014:112; Yan & Dooley 2014:10). Cooperative relations across a firm's supply chain are driven by factors such as trust, commitment and information-sharing intentions (Wu *et al.* 2014:123). This further supports the strategic value and role of cooperation among businesses. Also, joint interaction with business associates has been found to contribute significantly to the improvement of innovative processes as technical knowledge and expertise are shared across departments and organisations, thus increasing the efficiency of firms (Hottenrott & Lopes-Bento 2014:1). Technological cooperation in, for example, electronic resources planning (ERP) has been viewed as fundamental to enable supplying organisations to manage better and oversee their resources, which further results in quicker responses to customer/consumers' demands and

success in meeting their expectations of quality (Kim & Cho 2012:1). Cooperation, therefore, is a facilitator in improving the quality of suppliers' performance as well as increasing the flexibility of their operations (Yeung, Lee, Yeung & Cheng 2013:548). As such, it is hypothesised that:

H_5: Buyer-supplier cooperation exerts a positive influence on supplier performance in the FMCG retail industry.

2.7 Supplier performance and firm performance

Supplier performance is defined as a firm's capability to effectively perform its operational activities to either meet or exceed the expectations of its business partners in terms of quality, responsiveness and flexibility (Mols, Hansen & Villadsen 2012:875; Prajogo, Chowdhury, Yeung & Cheng 2012:125). Assessing supplier performance impacts significantly on the effectiveness of supply chain performance, and efficient communication channels between businesses are fundamental in improving the entire operations process (Dey, Bhattacharya, Ho & Clegg 2015:193; Stouthuysen, Slabbinck & Roodhooft 2012:425). Supplier performance of a higher quality creates better chances of maintaining the continuous flow of products supplied, which in turn leads to the improved delivery of the required level of product supply to customers (Aksoy & Ozturk 2011:6351; Wu *et al*. 2010:115). It also enhances both the performance of the firm and that of the entire supply chain (Jajja, Kannan, Brah & Hassan 2017:1054; Losonci & Demeter 2013:221). Better supplier performance as derived from an effective exchange of information contributes significantly to the performance of a firm (Ho, Feng, Lee & Yen 2012:7102). On this basis, the following hypothesis is formulated:

H_6: Supplier performance exerts a positive influence on firm performance in the FMCG retail industry.

2.8 Firm performance

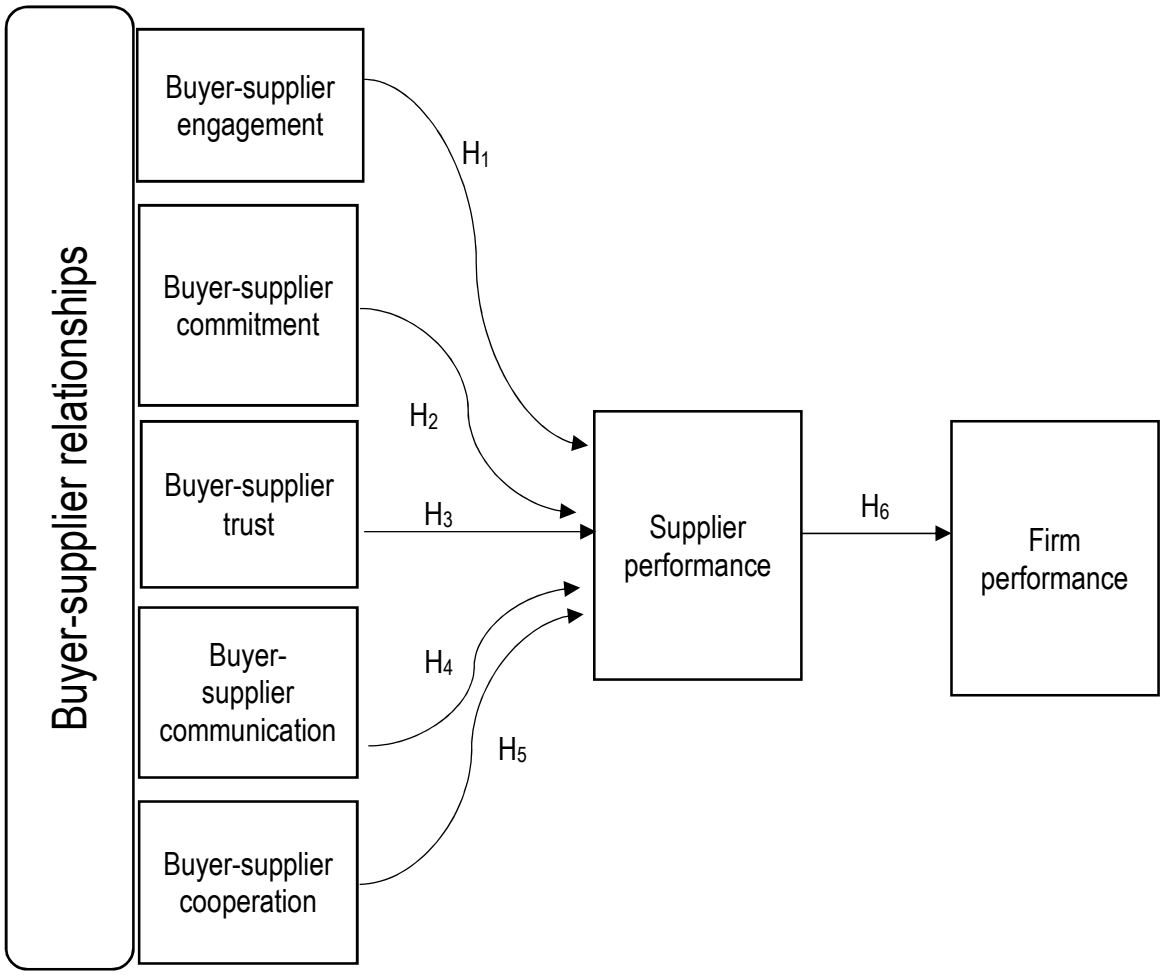
According to Smith and Reece (1999:146), firm performance is the operational ability to satisfy the desires of the major stakeholders of a firm. Firm performance is driven by various factors, such as the effective interaction between business partners, the exchange of relevant information and market expertise, and the possession of sustainable competitive

advantages by a firm (Kang & Kim 2010:483; Minguela-Rata, Lopez-Sanchez & Rodriguez-Benavides 2010:397). Other possible drivers of firm performance include speed, flexibility, quality, growth, delivery and fast response to market requirements (Camisón & Villar-López 2014:2891; Wang & Wang 2012:8900). Additionally, the adoption of various best practices such as business process re-engineering, disruptive innovations, green practices, supply chain management, total quality management and state of the art information and communication technologies, amongst others, also leads to healthier firm performance (Ahmad, Zakuan, Jusoh & Takala 2012:186; Breja, Banwet & Iyer 2011:6; Konecny & Thun 2011:498). Santos and Brito (2012:95) observed that there is a lack of a consensus on the appropriate measurement of firm performance, despite its relevance to the effectiveness, efficiency and success of firms. Some studies (e.g. Choong 2013:299; Wood 2006:441) have relied on objective measures such as sales, profit, turnover, return on investment and design quality to capture the level of firm performance. However, other studies (e.g. de Clercq & Dimov 2010:1; Nguegan Nguegan & Mafini 2017:485; Santos & Brito 2012:95; Vij & Bedi 2015:1) have supported the use of subjective measures in assessing firm performance dimensions such as financial, environmental and social outputs. In this study, subjective measures were used to assess the performance of firms within the FMCG retail industry, based on the view that these measures, if validated, still provide a concrete analysis of firm performance in the FMCG retail industry.

3. CONCEPTUAL FRAMEWORK

The conceptual framework (Figure 1) of the study is designed around the relationships among the constructs that have been identified from the literature.

Figure 1: Conceptual framework for buyer-supplier relationships, supplier and firm performance



Source: Authors' own work

Figure 1 presents the interactions of the constructs in the study and the suggested effects these interactions on firm performance. The framework suggests that the five relationship factors (buyer-supplier engagement, commitment, trust, communication and cooperation) are the predictors that combine to enhance supplier performance, which, acting as mediator, leads to successful firm performance.

4. RESEARCH METHODOLOGY

4.1 Research design

This quantitative study used a cross-sectional survey of FMCG retail firms operating in Gauteng, to investigate the direct and indirect interplay amongst the dependent and independent constructs derived from the literature, as recommended by Schmidt and Kohlmann (2008:165). Use of the quantitative design was appropriate since the study was investigating relationships between different constructs, and the need to generalise the results to other environments.

4.2 Research sample

The study used respondents who work in the supply chain departments of firms in the FMCG retail industry in Gauteng Province. The selection of FMCG retail firms based in Gauteng was motivated by the fact that it is the economic heartland of the country. An internet search was made for firms operating in the FMCG retail industry in the province. Out of the 64 firms identified and contacted, 37 were willing to participate in the study. A non-probability convenience sampling technique was employed in selecting the firms and the actual respondents since there was no specific sampling frame from which a list of the firms operating in the FMCG retail industry could be obtained. The questionnaires, which were directed to managers and professional employees, were distributed using the drop-and-collect approach. This approach was selected because it is time efficient and, more importantly, allowed respondents the choice to complete the survey. The questionnaires were then collected after two weeks, to allow the respondents sufficient time to complete them.

4.3 Measurement Scales

The questionnaire was designed after a comprehensive review of literature, using a Likert-type scale structure to gather information and views from managers and employees in FMCG retail firms. Buyer-supplier engagement was measured using a five-item scale adapted from Kannan and Tan (2007:755). Buyer-supplier trust was measured using a three-item scale adapted from Zaheer, McEvily and Perrone (1998:141) while buyer-supplier commitment was measured using three items adapted from and Morgan and Hunt (1994:20). Buyer-supplier communication was measured using five items adapted from

previous studies by Harcourt, Richerson and Wattier (1991:348) and del Bosque Rodríguez, Agudo and Gutiérrez (2006:666). Buyer-supplier cooperation was measured using five items derived from previous studies by Li, Rao, Ragu-Nathan and Ragu-Nathan (2005:618) and Flynn, Huo, and Zhao (2010:58). Supplier performance was measured using five-items adapted from previous studies by Chen and Paulraj (2004:119) and Humphreys, Li and Chan (2004:131). Firm performance was measured using four items adapted from Naor, Goldstein, Linderman and Schroeder (2008:671). Except for firm performance, all measurement scales were measured on a seven-point Likert-type scale anchored by 1= strongly disagree to 7= strongly agree. However, response options used for firm performance were presented in a seven-point Likert-type scale anchored by 1=decreased significantly and 7= increased significantly. The item adaptation process consisted of ensuring that the essence and content of the questions were retained and that they were also aligned the environment of the study. A few sentences and words were revised, to fit the context and ensure a clear understanding of the questions asked. No translation was required because the original items were in English and were in line with the context of this study. The questionnaire was then pilot tested using 40 conveniently selected respondents. A list of the measurement scale items is available in Appendix 1.

4.4 Data analysis

The analysis of data was conducted using the Statistical Packages for the Social Sciences (SPSS version 24) and the Analysis of Moment Structures (AMOS version 24.0) to perform the Confirmatory factor analysis (CFA), in which the psychometric properties of the measurement scales were tested. The CFA was followed by the testing of hypotheses using the structural equation modelling approach (SEM). As suggested by Bagozzi and Yi (1988:74), research hypotheses are analysed through the use of SEM, because it provides a credible estimation of the relationships that could exist between dependent and independent variables.

5. RESEARCH RESULTS

The results section presents and discusses the results obtained from the data analysis process. Issues discussed include the demographic details of respondents, CFA results, model fit and the results of the hypotheses tests.

5.1 Demographic results

The initial sample size for the study was pegged at n=400. From the 400 questionnaires distributed, 283 were recouped and subjected to a screening process. A total of 244 questionnaires were used in the final data analysis, and 39 were discarded because they were not properly completed. This accounts for an acceptable response rate of 61%. The demographic profile of respondents is indicated in Table 1.

Table 1: Demographic details of respondents

Variables	Categories	n	Percentage (%)
Gender	Male	132	54.1
	Female	112	45.9
Total (N)		244	100
Race	Black	176	72.1
	White	54	22.1
	Indian	10	4.1
	Mixed race	4	1.6
Total (N)		244	100
Age Group	18-30 years	107	43.9
	31-40 years	60	24.6
	41-50 years	51	20.9
	51+	26	10.7
Total (N)		244	100
Position Occupied	Professional/Specialists	138	56.7
	Supervisor	21	8.6
	Middle Management	15	6.2
	Senior management	3	1.2
	Other	67	27.4
Total (N)		244	100

Qualification	Matric	79	32.4
	Certificate	25	10.2
	Diploma	86	35.2
	Degree	31	12.7
	Postgraduate	12	5.0
	Other	11	4.5
Area of Responsibility	Procurement (buyer)	94	38.5
	Warehousing	33	13.5
	Logistics and transportation	14	5.7
	Customer/client services	87	35.7
	Other (e.g. planning, technology, financial, etc.)	16	16.6
Total		244	100

Source: Authors' own work

Table 1 provides the demographic results of the respondents. Of the 244 respondents, the majority were male (54%; n=132). Regarding racial profile, blacks were the most represented race in the sample (72%; n=176). After collapsing the ages into separate groups, it was found that most respondents were aged between 18 and 30 years (44%; n=107). As regards the positions held, the majority of respondents (57%; n=138) were in the professional/specialist category. With respect to qualifications, the largest group of respondents (35%; n=86) were holders of diplomas. Additionally, the largest group of respondents (38%; n=94) were employed in procurement divisions, followed by those who were in customer/client services (35%; n=87).

5.2 Confirmatory Factor Analysis

As suggested by Randhawa and Ahuja (2017:1592) the CFA procedure was conducted to test for the reliability, validity and model fit of the measurement scales. Scale purification was conducted after a pilot study involving 40 respondents conveniently selected from FMCG retail firms in Gauteng Province. Preliminary reliability was assessed using item-total correlations, which were expected to meet the suggested 0.3 cut-off point (Field 2005:1). Through this process, two items were dropped from the buyer-supplier engagement scale and another two from the buyer-supplier commitment scale. An item was also dropped from

the buyer-supplier trust scale, and another from the supplier performance scale, which improved the reliability of these measurement scales.

The reliability of the constructs of this study was examined using two indicators, namely: Composite reliability (CR) and the Cronbach alpha coefficient. As recommended by Hulland (1999:195), the CR of a measurement scale is acceptable if the threshold ratio is equal to or above 0.7. The results of the analysis revealed that the CR of buyer-supplier engagement scored 0.72; buyer-supplier commitment scored 0.70, buyer-supplier trust scored 0.75; buyer-supplier cooperation scored 0.73, buyer-supplier communication scored 0.71; supplier performance scored 0.79, and firm performance scored 0.71. Bagozzi and Yi (1988:74) suggested that the Cronbach alpha value is acceptable when it is equal to or higher than the required cut-off value of 0.7. Cronbach alpha results presented the following reading for each construct: buyer-supplier engagement 0.7, buyer-supplier commitment 0.73, buyer-supplier trust 0.79, buyer-supplier communication 0.74, buyer-supplier cooperation 0.78, supplier performance 0.71; and firm performance scored 0.78. These results demonstrate that all measurement scales considered in this study met the required thresholds. As such, the measurement scales for all constructs were deemed to be reliable.

The convergent validity of research instruments is determined by the factor loadings of each item on the scale, which should be equal to or greater than 0.5 (Anderson & Gerbing 1988:411). The analysis offered the following readings: buyer-supplier engagement (BSE_1= 0.78; BSE_2= 0.71; BSE_3= 0.64; BSE4= 0.60; BSE_5= 0.71); buyer-supplier commitment (BSC_1=0.56; BSC_2=0.63; BSC_3=0.59); buyer-supplier trust (BST_1= 0.65; BST_2= 0.51; BST_3= 0.59; BST_4= 0.72); buyer-supplier communication ($BSCM_1$=0.54; $BSCM_2$=0.67; $BSCM_3$=0.63; $BSCM_4$=0.64; $BSCM_5$=0.60); buyer-supplier cooperation ($BSCP_1$= 0.59; $BSCP_2$= 0.69; $BSCP_3$= 0.70; $BSCP_4$= 0.74; $BSCP_5$= 0.67); supplier performance (SP_1= 0.72; SP_2= 0.62; SP_3= 0.52; SP_4= 0.63); and firm performance (BP_1= 0.58; BP_2= 0.78; BP_3= 0.68; BP_4= 0.61; BP_5= 0.70; BP_6=0.55). These figures reveal that factor loadings for all measurement scales met or exceeded the cut-off threshold of 0.5. This means that each item measured at least 50% of what it was expected to measure and all of them converged well with their respective variables. Discriminant validity was established through inter-factor correlations. Correlation values less than 0.85 depict that discriminant validity exists between

the scales since the constructs do not overlap each other and are measuring different things (Fornell & Larcker 1981:39). The results of the correlation analysis are presented in Table 2.

Table 2: Inter-factor correlations

CONSTRUCTS	BSE	BSC	BST	BSCM	BSCP	SP	BP
B-S Engagement	1.000						
B-S Commitment	.444**	1.000					
B-S trust	.523**	.421**	1.000				
B-S Communication	.645**	.389**	.233**	1.000			
B-S Cooperation	.550**	.684**	.413**	.256**	1.000		
Supplier performance	.372**	.460**	.604**	.403**	.568**	1.000	
Firm performance	.501**	.300**	.739**	.395**	.241**	.522**	1.000

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

B-S= Buyer-supplier

Source: Authors' own work

An analysis of Table 2 shows that inter-factor correlations were positive, and ranged between r=0.241 and r=0.739. Since these correlation values were below the recommended maximum threshold of 0.85, it was considered that discriminant validity was satisfactory in this study.

The results of the inter-factor correlation analysis further revealed that the constructs considered in this study are positively and significantly associated. These results demonstrate that the constructs tested are positively associated such that an increase in one results in the positive increase of the others. The highest correlation coefficient was calculated between buyer-supplier trust and firm performance (r=0.737), which illustrates that the strongest association existed between these two constructs when compared to the others.

5.3 Model fit analysis

To determine the model fit in the CFA, several indices were employed. Cheung and Rensvold (2002:233) recommend use of the Chi-square value over degree of freedom ($\chi 2/df$) whose value should be ≤ 3.0; Comparative Fit Index (CFI), Incremental Fit Index (IFI), The normed fit index (NFI); Goodness-of-Fit Index (GFI), Tucker-Lewis Index (TLI) whose values need to be ≥ 0.9, and the Root Mean Square Error of Approximation (RMSEA) whose the value needed to be ≤ 0.08. The results of the analysis revealed the following: ($\chi 2/df$) = 2.78; CFI= 0.945; IFI= 0.93; NFI= 0.924; GFI= 0.921; TLI= 0.951 and RMSEA= 0.075. All of the above values obtained met the suggested threshold values, indicating that the model fit was acceptable.

5.4 Hypotheses testing results

Model fit analysis was also conducted for the SEM model, using the same indices as those used in the CFA. The analysis revealed the following: ($\chi 2/df$) = 1.42; CFI= 0.938; IFI= 0.910; NFI= 0.907; GFI= 0.923; TLI= 0.917 and RMSEA= 0.064. All of the model fit values obtained satisfied the recommended cut-off limits, indicating that model fit was acceptable. The results of the hypotheses tests were considered, and are reported in Table 3.

Table 3: Results of structural equation model analysis

Path Coefficients	Hypothesis	Beta Coefficient	P-values	t-values	Decision
Buyer-supplier engagement → supplier performance	H_1	0.361*	0.035	2.125	Accepted
Buyer-supplier commitment → supplier performance	H_2	0.446*	0.007	2.744	Accepted
Buyer-supplier trust → supplier performance	H_3	0.612*	0.001	3.256	Accepted
Buyer-supplier communication → supplier performance	H_4	0.423*	0.047	2.001	Accepted

Buyer-supplier cooperation → supplier performance	H_5	0.585*	0.010	2.588	Accepted
Supplier performance → Firm performance	H_6	0.537*	0.025	2.262	Accepted
Structural model fits: χ^2/df=2.85; GFI=0.90; IFI=0.78; CFI= 0.95; NFI=0.91; TLI= 0.95; RMSEA=0.07					
Significance level <0.05; *					

Source: Authors' own work

4. DISCUSSION AND CONCLUSIONS

The study aimed to investigate the perceived influence of buyer-supplier relationships on firm performance in the FMCG retail industry. The key relationship aspects that were identified from the literature were engagement, commitment, trust, communication and cooperation between buyer and supplier organisations (Boyce *et al*. 2016:1; Mugarura 2010:8; Vieira *et al*. 2012:264). These components of business relationships were examined in terms of their direct influence on supplier performance, and the study further explored the mediating role of supplier performance on firm performance. The conceptual framework that guided the study was based on six hypotheses, which were all supported and accepted. All of the proposed hypotheses, ($H_{1,2,3,4}$ and $_5$) revealed that buyer-supplier engagement, commitment, trust, communication and cooperation exert a positive and significant influence on supplier performance, which supports their relevance and value as a group of predictors that significantly contribute to the ability of suppliers to meet the needs and requirements of their buying partners. Buyer-supplier trust exerted the greatest influence on supplier performance (β= 0.612; *p*=0.001; t=3.256). These results demonstrate that supplier performance in the FMCG retail industry is dependent on the strength of their relationships with buying organisations, with trust being the most important relationship factor. Therefore, these results are consistent with previous research results by Cingano and Pinott (2016) and Susanty *et al*. (2017) that confirm that buyer supplier relationships, especially the trust factor, are important determinants of firm performance.

In the final result of the study, based on hypothesis (H_6) supplier performance exerted a significant positive influence on firm performance (β= 0.537; *p*=0.025; t=2.262). This result has two implications. Firstly, the result implies that in the FMCG retail industry, the performance of suppliers contributes to firm performance. Secondly, the result denotes that supplier performance mediates the relationship between buyer-supplier relationships and firm performance. This demonstrates that buyer-supplier relationships contribute to firm performance through their positive effect on supplier performance.

The relevance of buyer-supplier relationships has been acknowledged to be prominent in other industries as well. For example, Piderit, Flowerday and Von Solms (2011:473) recognised trust as an important factor contributing to firms' success in the South African automotive industry. Naude *et al*. (2013:1) identified the cultivation of strong buyer-supplier relationships as a critical strategic tool to enhance the effectiveness of public procurement in South Africa. This further emphasises the value and critical nature of buyer-supplier relationships in both the public and private sectors. Firms operating in the FMCG retail industry could, therefore, take a leaf from these results and use them as a basis for developing and maintaining stronger long-term relationships with their business partners if they are to remain competitive.

5. IMPLICATIONS OF THE STUDY

The study confirms the role of buyer supplier relationships in improving supplier and firm performance in the FMCG retail industry, and therefore study carries some strategic implications to both academia and industry. From an academic standpoint, the present study significant because it is an addition to the literature on supply chain management in the South African FMCG retail industry. This being the case, the results of this study provide more insights into understanding how buyer-supplier relationships contribute to the success of firms specifically within the FMCG retail supply chain. From an industry perspective, the study acts as a reference tool in the diagnoses of both supplier and firm performance related challenges. The study suggests that both supplier and firm performance could be improved by strengthening the relationships between buying and supplying firms along the five dimensions considered in this study. Supply chain managers and professionals in the FMCG retail industry should therefore understand the value of developing and building strong

relationships with their firms' supply chain partners as this leads to significant paybacks realised through marked improvements in both supplier and firm performance.

Since positive relationships were observed between all constructs, several activities can be implemented to strengthen buyer-supplier relationships inorder to improve both supplier and firm performance within the FMCG retail industry. It is important to create and maintain channels of consistent communication since communication is the key to healthy relationships between supply chain partners. The use of state of the art technology could facilitate the integration of business activities between supply chain partners, thereby creating better transparency and streamlining simple tasks such as contract renewal and order management. Where a supplier is failing to meet the needs of a more established buying firm, supplier development programs could be employed to grow the technical abilities of that supplier. It is also important to conduct joint improvement activities such as exchanging best practices and establishing other side businesses which are jointly owned by both firms. For buying firms, there should be the recognition that supplier relationship management is a strategic tool that should be embedded in all supply chain management activities. Training and development of staff on the importance of strong supply chain relationships may assist in developing a culture of mutual respect, trust and cooperation between supply chain partners.

6. LIMITATIONS AND IMPLICATIONS FOR FURTHER STUDIES

Despite the merits of the study, it is important to mention that the completion of this investigation was not exempted from any challenges which might hinder its relevance. One of the main limitations that could be directed to the study resides in its scope. The fact that the study was conducted in one specific province (Gauteng) and the results are based on only 244 respondents could be seen as problematic. Amplification of the actual scope to all provinces could provide better and a more in-depth reading of the results. Another limitation of the study could be on research design adopted. The provision of questionnaires to respondents could be regarded as a challenge because some may have found the content difficult or not specific enough on aspects related to daily operations. Future studies could, therefore, be conducted using a mixed method, which incorporates face to face interviews with participants, leading to a greater variety of results.

REFERENCES

ABDOLMALEKI K. & AHMADIAN S. 2016. The Relationship between Product Characteristics, Customer and Supplier Involvement and New Product Development. *Procedia Economics & Finance* 36:147-156.

ABOSAG I & LEE J. 2013. The formation of trust and commitment in business relationships in the Middle East: Understanding Et-Moone relationships. *International Business Review* 22(3):602-614.

AGIGI A, NIEMANN W & KOTZÉ T. 2016. Supply chain design approaches for supply chain resilience: a qualitative study of South African fast-moving consumer goods grocery manufacturers. *Journal of Transport and Supply Chain Management* 10(1):a253.]Internet:http://dx.doi. org/10.4102/jtscm.v10i1.253; downloaded on 23 September 2018.]

AHMAD MF ZAKUAN N, JUSOH A & TAKALA J. 2012. Relationship of TQM and Business Performance with Mediators of SPC, Lean Production and TPM. *Procedia - Social & Behavioral Sciences* 65:186-191.

AKSOY A & OZTURK N. 2011. Supplier selection and performance evaluation in just-in-time production environments. *Expert Systems with Applications* 38:6351-6359.

ANDERSON J C & GERBING DW. 1988. Structural equation modeling in practice: a Review and recommended two-step approach. *Psychological Bulletin* 103(3):411-423.

AUTRY CW & GOLICIC SL. 2010. Evaluating buyer-supplier performance spirals: a longitidunal study. *Journal of operation management* 28(2):87-100.

BADENHORST-WEISS JA & TOLMAY AS. 2016. Relationship value, trust and supplier retention in South African automotive supply chains. *The Journal of Applied Business Research* 32(5):1329-1339.

BAGOZZI R P & YI Y. 1988. On the evaluation of structural equation models. *Journal of Academy of Marketing Science* 16(1):74-94.

BOTES A, NIEMANN W & KOTZÉ T. 2017. Buyer-supplier collaboration and supply chain resilience: a case study in the petrochemical industry. *South African Journal of Industrial Engineering* 28(4):183-199.

BOYCE WS, MANO H & KENT JL. 2016. The influence of collaboration in procurement relationships. *International Journal of Managing Value & Supply Chains* (IJMVSC) 7(3):1-18.

BREJA SK, BANWET DK & IYER KC. 2011. Quality strategy for transformation: a case study. *The TQM Journal* 23(1):5-20.

BRICCI L, FRAGATA A & ANTUNES J. 2016. The effects of trust, commitment and satisfaction on customer loyalty in the distribution sector. *Journal of Economics, Business & Management* 4(2):173-177.

BRUWER JP. 2016. The relationship(s) between the managerial conduct and the internal control activities of south African fast-moving consumer goods SMMEs. Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa. (Doctoral thesis.)

CAMISÓN C & VILLAR-LÓPEZ A. 2014. Organisational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research* 67 2891-2902.

CAO M & ZHANG Q. 2013. Coordination strategy of green supply chain under the free market mechanism. *Energy Procedia* 36 1130-1137.

CAO M, VONDEREMBSE MA, ZHANG Q & RAGU-NATHAN T. 2010. Supply chain collaboration: conceptualisation and instrument development. *International Journal of Production Research* 48(22):6613-6635.

CARTER L. 2014. FMVG Branding-Going for Gold. [Internet:http//www. Personadesign>ie; downloaded on 06 August 2014.]

CARTON AM, & CUMMINGS JN. 2012. A theory of subgroups in work teams. *Academy of Management Review* 37(3):441-470.

CHEN IJ & PAULRAJ A. 2004. Towards a theory of supply chain management: the constructs and measurements. *Journal of Operations Management* 22(2):119-150.

CESCHI A, DOROFEEVA K & SARTORI R. 2014. Studying teamwork and team climate by using a business simulation: how communication and innovation can improve group learning and decision-making performance. *European Journal of Training and Development 38*(3):211-230.

CHEUNG GW & RENSVOLD RB. 2002. Evaluating Goodness-of-Fit Indexes for Testing Measurement Invariance. Structural equation modeling 9(2):233-255.

CHINOMONA R & HOVE P. 2015. The influence of supplier involvement on communication, relationship longevity and business performance in small, medium and micro enterprises in South Africa. *Journal of Economics and Behavioral Studies* 7(3):63-75.

CHOONG PFM. 2013. The culture of research is based on quality and excellence. *Editorial* 83(5):299-315.

CINGANO F & PINOTTI P. 2016. Trust, firm organization, and the pattern of comparative advantage. *Journal of International Economics* 100:1-13.

DAVID EM & GOVENDER KK. 2014. Re-branding fast moving consumer goods in an international company in South Africa. *Journal of Economics* 5(2):153-164.

DE CLERCQ D & DIMOV D. 2010. Doing it not alone: antecedents, dynamics and outcomes of venture capital syndication. In: Cumming D J. Edition venture capital. Chichester, U.K: John Wiley & Sons limited.

DEL BOSQUE RODRÍGUEZ IR, AGUDO JC & GUTIÉRREZ HSM. 2006. Determinants of economic and social satisfaction in manufacturer - distributor relationships. *Industrial Marketing Management* 35(6):666-675.

DEY PK, BHATTACHARYA A, HO W & CLEGG B. 2015. Strategic supplier performance evaluation: a case-based action research of a UK manufacturing organisation. *International Journal of Production Economics* 166:192-214.

DYER JH & CHU W. 2000. The determinants of trust in supplier-automaker relationships in the U.S., Japan and Korea. *Journal of International Business Studies* 31(2):259-285.

ELLINGER AE MUSGROVE CF, ELLINGER AD, BACHRACH DG, BAŞ ABE & WANG YL. 2013. Influences of organisational investments in social capital on service employee commitment and performance. *Journal of Business Research* 66:1124-1133.

FAWCETT, SE, ELLRAM LM & OGDEN JA. 2014. Supply Chain Management from Vision to Implementation. Essex: Pearson.

FEDDERKE JW. 2018. Exploring unbalanced growth: Understanding the sectoral structure of the South African economy. *Economic Modelling* 177-189.

FIELD A. 2005. Discovering Statistics Using SPSS. 2nd ed. London: Sage.

FLYNN BB, HUO B & ZHAO X. 2010. The impact of supply chain integration on performance: a contingency and configuration approach. *Journal of Operations Management* 1: 58-71.

FORNELL C & LARCKER DF. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research* 18(1):39-50.

FOSSAS-OLALLA M, MINGUELA-RATA B, ESCO-MANGAS L & SANDULLI FD. 2013. Cooperation strategy in buyer-supplier relationships and its effect on business performance. Barcelona, Spain: DRUID. (35th DRUID celebration conference, 17-19.)

FOSSAS-OLALLA M, MINGUELA-RATA B, LOPEZ-SANCHEZ J-I & FERNANDEZ-MENENDEZ J. 2015. Product innovation: When should suppliers begin to collaborate? *Journal of Business Research* 68(7):1404-1406.

GUALANDRIS J & KALCHSCHMIDT M. 2015. Developing environmental and social performance: the role of suppliers' sustainability and buyer-supplier trust. *International Journal of Production Research* 54(8):2470-2486.

HA BC, PARK YK & CHO S. 2011. Suppliers' affective trust and trust in competency in buyers: its effect on collaboration and logistics efficiency. *International Journal of Operations and Production Management* 31(1):56-77.

HARCOURT J, RICHERSON V & WATTIER MJ. 1991. A national study of middle managers' assessment of organisation communication quality. *Journal of Business Communication* 28(4):348-365.

HENKE JW & ZHANG C. 2010. Increasing supplier-driven innovation. *MIT Sloan Management Review* 51(2):41-46.

HO LI, FENG SY, LEE YC & YEN TM. 2012. Using modified IPA to evaluate supplier's performance: multiple regression analysis and DEMATEL approach. *Expert Systems with Applications* 39:7102-7109.

HOTTENROTT H & LOPES-BENTO C. 2014. (International) R&D collaboration and SMEs: The effectiveness of targeted public R&D support schemes. *Research Policy* 43:1055-1066.

HULLAND J. 1999. Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic management journal* 20(2):195-204.

HUMPHREYS PK, LI WL & CHAN LY. 2004. The impact of supplier development on buyer-supplier performance. *Omega* 32(2):131-143.

JAIN M, KHALIL S, JOHNSTON WJ & CHENG JMS. 2014. The performance implications of power-trust relationship: the moderating role of commitment in the supplier-retailer relationship. *Industrial Marketing Management* 43:312-321.

JAJJA MSS, KANNAN VR, BRAH SA & HASSAN SZ. 2017. Linkages between firm innovation strategy, suppliers, product innovation, and business performance: insights from resource dependence theory. *International Journal of Operations & Production Management* 37(8):1054-1075.

JOKELA P, & SÖDERMAN A. 2017. Re-examining the link between fairness and commitment in buyer-supplier relationships. *Journal of Purchasing and Supply Management* 23(4):268-279,

KANG M & KIM YG. 2010. A multilevel view on interpersonal knowledge transfer. *Journal of the American Society for Information Science and Technology* 61:483-494.

KANNAN VR & TAN KC. 2006. Buyer-supplier relationships: the impact of supplier selection and buyer-supplier engagement on relationship and firm performance. *International Journal of Physical Distribution & Logistics Management* 36(10):755-775.

KETKAR S, KOCK N, PARENTE R & VERVILLE J. 2012. The impact of individualism on buyer–supplier relationship norms, trust and market performance: in analysis of data from Brazil and the U.S.A. *International Business Review* 21: 782-793.

KHAN MR, ZIAUDDIN JAM FA & RAMAY MI. 2010. The impacts of organisational commitment on employee job performance. *European Journal of Social Sciences* 15(3):292-298.

KIM J & CHO C. 2012. A case study on the strategy and way to promote IT collaboration between SMEs and Large Firms in The Heavy Industries. *IE Interfaces* 25(1):1-12.

KOH TK, FICHMAN M & KRAUT RE. 2012. Trust across borders: buyer-supplier trust in global business-to-business e-commerce. *Journal of the Association for Information* Systems 13(11):886-922.

KOMPASO S, & SRIDEVI MS. 2010. Employee engagement: The key to improving performance. *International Journal of Business & Management* 5(12):89-96.

KONECNY P & THUN JH. 2011. Do it separately or simultaneously an empirical analysis of a conjoint implementation of TQM and TPM on plant performance. *International Journal of Production Economics* 133(2):496-507.

LEKHANYA LM, OLAJUMOKE NG & NIRMALA D. 2017. Exploring fast moving consumer goods (FMCG) small, medium and micro enterprises manufacturers' need for innovation to achieve growth. *Environmental Economics* 8(2):8-16.

LI S, RAO SS, RAGU-NATHAN TS & RAGU-NATHAN B. 2005. Development and validation of a measurement instrument for studying supply chain management practices. *Journal of Operations Management* 23(6):618-641.

LOSONCI D & DEMETER K. 2013. Lean production and business performance: international empirical results. *Competitiveness Review: An International Business Journal* 23(3):218-233.

LUMLEY EJ, COETZEE M, TLADINYANE R & FERREIRA N. 2011. Exploring the job satisfaction and organisational commitment of employees in the information technology environment. *Southern African Business Review* 15(1):100-118.

MICHAELIDOU N, SIAMAGKA NT & CHRISTODOULIDES G. 2011. Usage, barriers and measurement of social media-marketing: an exploratory investigation of small and medium B2B brands. *Industrial Marketing Management* 40(7):1153-1159.

MINGUELA-RATA B, LOPEZ-SANCHEZ JI & RODRIGUEZ-BENAVIDES MC. 2010. Knowledge transfer mechanisms and the performance of franchise systems: an empirical study. *African Journal of Business Management* 4:396-405.

MOHANTY MK & GAHAN P. 2012. Buyer supplier relationship in manufacturing industry - findings from Indian manufacturing sector. *Business Intelligence Journal* 5(2):319-333.

MOLS NO, HANSEN JR & VILLADSEN AR. 2012. Plural governance: the effect of internal production on supplier performance. *Journal of Industrial Marketing Management* 41:874-885.

MORGAN RM & HUNT SD. 1994. The commitment-trust theory of relationship marketing. *The Journal of Marketing* 58(3):20-38.

MUGARI A. 2015. Supply chain integration with corporate strategy for selected companies in the fast-moving consumer goods industry in KwaZulu-Natal, South Africa. Faculty of Management Sciences, Durban University of Technology, Durban, South Africa. (Doctoral thesis.)

MUGARURA JT. 2010. Buyer-supplier collaboration, adaptation, trust, commitment and relationship continuity of selected private manufacturing firms in Kampala. Makerere University Business School, Makerere University, Uganda. (Master's dissertation.)

MUKUMBA T. 2014. Overcoming SMEs challenges through critical success factors: A case of SMEs in the Western Cape Province, South Africa. *Economic & Business Review* 16(1):19-38.

NAOR M, GOLDSTEIN SM, LINDERMAN KW & SCHROEDER RG. 2008. The role of culture as driver of quality management and performance: infrastructure versus core quality practices. *Decision Sciences* 39(4):671-702.

NAUDE M J, AMBE IM & KLING R. 2013. Supplier relationship management–anathema for the South African public procurement sector. *Journal of Transport & Supply Chain Management* 7(1):1-8.

NGUEGAN NGUEGAN CA & MAFINI C. 2017. Supply chain management problems in the food processing industry: implications for business performance. *Acta Commercii* 17(1):a485. [Internet:https://doi.org/10.4102/ac.v17i1.485; downloaded on 23 September 2018.]

OZKAN-TEKTAS O. 2014. The effects of opportunism and trust on buyer-supplier relationship: do commitment types matter? *International Journal of Business & Social Research* 4(09):14-26.

PEI X. 2011. Influencing factors of communication in buyer-supplier partnership. M. Zhu (Ed.): ICCIC. (Part VI, CCIS, 236 105-109.)

PIDERIT R, FLOWERDAY S & VON SOLMS R. 2011. Enabling information sharing by establishing trust in supply chain: a case study in the South African automotive industry. *South African Journal of Information Management* 13(1):473-478.

PRAJOGO D, CHOWDHURY M, YEUNG A.L & CHENG TCE. 2012. The relationship between supplier management and firm's operational performance: a multi-dimensional perspective. *International Journal of Production Economics* 136:123-130.

PRICEWATERHOUSECOOPERS. 2012. *South African retail and consumer products outlook* 2012-2016:1-37. [Internet:https://www.pwc.co.za/ en/assets/pdf/retail-and-consumer-products-outlook-2012-2016.pdf; downloaded on 25 February 2018.]

RAI A, PAVLOU PA, IM G & DU S. 2012. Interfirm IT capability profiles and communications for co-creating relational value: evidence from the Logistics Industry. *MIS Quarterly* 36(1):233-262.

RANDHAWA JS & AHUJA IS. 2017. Structural equation modeling for validating impact of 5S implementation on business excellence of manufacturing organisations. *International Journal of Quality & Reliability Management* 34(9):1592-1615.

ROBERTS-LOMBARD M, MPINGANJIRA M & SVENSSON G. 2017. Antecedents and outcomes of satisfaction in buyer–supplier relationships in South Africa: a replication study. *South African Journal of Economic & Management Sciences* 20(1):1-14.

SANI A. 2013. Role of procedural justice, organisational commitment and job satisfaction on job performance: the mediating effects of organisational citizenship behaviour. *International Journal of Business & Management* 8(15):57-67.

SANTOS JB & BRITO LAL. 2012. Toward a subjective measurement model for firm performance. *BAR: Rio de Janeiro* 9(6):95-117.

SCHMIDT O & KOHLMANN T. 2008. When to use the odds ratio or the relative risk? *International Journal of Public Health* 53(3):165-172.

SEYAMA W. 2006. Factors of Successful Brand Extensions in the FMCG Industry. Gordon Institute of Business Science, University of Pretoria, South Africa. (Master's dissertation.)

SHAFIQ A. 2015. Supplier social engagement, reciprocity of social practices and performance in supply chains. The University of West Ontario, London, Ontario, Canada, 2954. (Doctoral thesis.)

SIWANGAZA L, SMIT Y, BRUWER JP & UKPERE WI. 2014.The status of internal controls in fast moving small medium and micro consumer goods enterprises within the Cape Peninsula. *Mediterranean Journal of Social Sciences* 5(10):163-175.

SMITH TM & REECE JS. 1999. The relationship of strategy, fit, productivity and business performance in a services setting. *Journal of Operations Management* 17(2):145-161.

STITES JP & MICHAEL JH. 2011. Organisational commitment in manufacturing employees: relationships with corporate social performance. *Business & Society* 50(1):50-70.

STOUTHUYSEN K, SLABBINCK H & ROODHOOFT F. 2012. Controls, service type and perceived supplier performance in inter-firm service exchanges. *Journal of Operations Management* 30:423-435.

STUART I, VERVILLE J & TASKIN N. 2009. Trust in buyer-supplier relationships: supplier competency, interpersonal relationships and outcomes. *ANZMAC* 1-8.

SUMA S & LESHA J. 2013. Job satisfaction and organisational commitment: the case of Shkodra municipality. *European Scientific Journal* 9(17):41-52.

SUSANTY A, BAKHTIAR A, JIE F & MUTHI M. 2017. The empirical model of trust, loyalty, and business performance of the dairy milk supply chain: A comparative study. *British Food Journal* 119(12):2765-2787.

VIEIRA LM, PAIVA EL, FINGER AB & TEIXEIRA R. 2013. Trust and supplier-buyer relationships: an empirical analysis. *Brazilian Administration Review* 10(3/2):263-280.

VIJ S & BEDI S. 2015. Effect of Organisational and environmental factors on innovativeness and business performance relationship. *International Journal of Innovation Management* 20(3):1-28.

WANG WYC, PAULEEN DJ & ZHANG T. 2016. How social media applications affect B2B communication and improve business performance in SMEs. *Industrial Marketing Management* 54:4-14.

WANG Z & WANG N. 2012. Knowledge sharing, innovation and firm performance. *Expert Systems with Applications* 39:8899-8908.

WOOD E H. 2006. The internal predictors of business performance in small firms. *Journal of Small Business and Enterprise Development* 13(3):441-452.

WONG CWY, LAI K, LUN YHV & CHENG TCE. 2012. A study on the antecedents of supplier commitment in support of logistics operations. *International Journal of Shipping & Transport Logistics* 4(1):5-16.

WU I, CHUANG C & HSU C. 2014. Information sharing and collaborative behaviors in enabling supply chain performance: a social exchange perspective. *International Journal Production Economics* 148(1):122-132.

WU Z, CHOI TY & RUNGTUSANATHAM MJ. 2010. Supplier-supplier relationships in buyer-supplier-supplier triads: implications for supplier performance. *Journal of Operations Management* 28:115-123.

YAN T & DOOLEY K. 2014. Buyer-supplier collaboration quality in new product development projects. *Journal of Supply Chain Management* 50(2):1-54.

YEUNG JHY, SELEN W, ZHANG M & HUO B. 2009. The effects of trust and coercive power on supplier integration. *International Journal of Production Economics* 120:66-78.

YEUNG K, LEE PKC, YEUNG ACL & CHENG TCE. 2013. Supplier partnership and cost performance: The moderating roles of specific investments and environmental uncertainty. *International Journal of Production Economics* 144:546–559.

YUCEL I. 2012. Examining the relationships among job satisfaction, organisational commitment, and turnover intention: an empirical study. *International Journal of Business and Management* 7(20):44-58.

ZAHEER A, MCEVILY B & PERRONE V. 1998. Does trust matter? Exploring the effects of interorganisational and interpersonal trust on performance. *Organisation Science* 9(2):141-159.

ZHANG C, VISWANATHAN S & HENKE JW. 2011. The boundary spanning capabilities of purchasing agents in buyer-supplier trust development. *Journal of Operations Management* 29:318-328.

APPENDIX 1

MEASUREMENT SCALES

BUYER-SUPPLIER ENGAGEMENT

BSE1: Our firm participates in sourcing decisions with its major suppliers

BSE2: Our firm is actively involved in the exchange of information with its business partners

BSE3: Our firm consistently ensures that there are mutual agreements and understanding of contractual terms with its business partners

BSE4: Our firm thrives to ensure good integration of operational activities with its supply chain members

BSE5: Our firm shares business's strategies and plans with its core suppliers

SCALE: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

BUYER-SUPPLIER COMMITMENT

BSC1: Our firm is committed to maintaining long-term relationship with our main suppliers

BSC2: Our firm has its suppliers' best interests at heart

BSC3: Our firm continuously thrives to meet its promises to its suppliers

SCALE: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

BUYER-SUPPLIER TRUST

BST1: Our firm is certain that its suppliers adopt fair negotiation tactics

BST2: Our firm is certain that its suppliers are consistent in keeping their promises

BST3: The relationships between our firm and its strategic suppliers are based on trust

SCALE: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

BUYER-SUPPLIER COMMUNICATION

BSCM1: Our suppliers communicate with us frequently

BSCM2: Our suppliers provide us with accurate and relevant information

BSCM3: Our suppliers make use of proper communication channels to engage us

BSCM4: Our suppliers have an effective communication strategy

BSCM5: Our suppliers share critical information and knowledge which are instrumental in improving our operation processes

Scale: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

BUYER-SUPPLIER COOPERATION

BSCP1: There is clear coordination of logistics operation activities between our firm and its suppliers

BSCP2: There us a mutual solving of problems between our firm and its suppliers

BSCP3: Our firm cooperates with its suppliers to achieve environmental objectives

BSCP4: Our firm cooperates with its suppliers to achieve social objectives

BSCP5: Our firm closely interacts and exchanges data and resources with its suppliers

SCALE: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

SUPPLIER PERFORMANCE

SP1: Our suppliers meet our quality requirements

SP2: Our suppliers consistently deliver products on-time

SP3: Our suppliers are flexible enough to adjust to sudden changes in orders

SP4: Our suppliers have a good corporate image and reputation

SCALE: 1= Strongly disagree; 2=disagree; 3=more or less disagree; 4=undecided; 5=more or less agree; 6=agree; 7=strongly agree

FIRM PERFORMANCE

BP1: Product quality

BP2: On-time delivery of products

BP3: Employee satisfaction

BP4: Product variety

BP5: Profitability

BP6: Firm reputation and image

SCALE: 1= Decreased significantly; 2= decreased; 3=more or less decreased; 4=undecided; 5=more or less increased; 6=increased; 7=increased significantly