Corrigendum: Customer experience, satisfaction and loyalty in business-to-business markets: Does the chain hold across customer segments?

In the version of the article initially published, Human, G., Ferreira, C.C., Robertson, J. & Whiterspoon, M., 2020, ‘Customer experience, satisfaction and loyalty in business-to-business markets: Does the chain hold across customer segments?’, Acta Commercii 20(1), a855. https://doi.org/10.4102/ac.v20i1.855, the surname of the fourth author was given incorrectly. The correct surname should be Witherspoon instead of Whiterspoon in the ‘Author’ and ‘How to cite this article’ sections.

This correction does not alter the study’s findings of significance or overall interpretation of the results. The authors apologise for any inconvenience caused.

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Customer experience, satisfaction and loyalty in business-to-business markets: Does the chain hold across customer segments?

Orientation: This study considers the influence of customer experience gained during sales interaction episodes on customer satisfaction, customer loyalty and ultimately willingness to recommend the focal firm in a business-to-business context and compares these associations across multiple firm-specific customer segments.

Research purpose: This study seeks to examine whether an experience–satisfaction–loyalty causal model would hold across case-specific heterogeneous customer segments in a business-to-business context.

Motivation for the study: Industrial marketing researchers often overlook customer experiences, particularly relating to sales interactions. These interactions are prone to variation across customer segments, and the associated heterogeneity may lead to gaps in our understanding of how such interactions could impact customer loyalty and ultimately willingness to recommend a firm in a business-to-business context.

Research design, approach and method: The quantitative design made use of a focal firm approach as a single case study of enquiry, surveying a valid sample of 1004 of the focal firm’s customers. The data was analysed using variance based structural equation modelling after being subjected to validity and reliability testing. The multigroup analysis was conducted using case driven characteristics to compare the theoretical model across customer segments.

Main findings: A simplified model to explain willingness to recommend was subjected to multi-group analyses across four key theoretical relationship dimensions. The results provide support for linkages between sales interaction experience, customer satisfaction, loyalty and ultimately willingness to recommend.

Practical/managerial implications: The findings could facilitate the development of relationship management strategies that account for the heterogeneity in customer segments.

Contribution/value-add: It appears useful to consider the heterogeneity that may exist between customer groups and segments that could potentially distort assumed linear associations.

Keywords: relationship marketing; emerging market; interaction experience; customer satisfaction; market heterogeneity.

Introduction

Every interaction with your company is another opportunity for your customer to determine if you are exceptional or not.

– Lisa Masiello

The notion that the quality of a purchase experience influences customer satisfaction, which in turn could impact customer loyalty to a particular seller, is common ground in marketing literature (De Haan, Verhoef & Wiesel 2015; Olsen 2002). Business-to-business markets and the relationships that buyers and sellers construct in those markets, however, entail complex and multi-level dimensions (Lemon & Verhoef 2016; Leonidou & Hultman 2019; Roberts-Lombard, Mpinganjira & Svensson 2019). These complex relationships and concomitant customer experiences represent heterogeneity that may challenge the underlying assumptions that drive the relationship development strategies of firms (Grönroos 2017; Paparoidamis, Katsikeas & Chumpitaz 2019).
Recent advances in customer experience research, in particular, underscore its invaluable importance as a key driver of success for companies across various industries (Grenholdt et al. 2015; Klaus & Maklan 2013; Lemke, Clark & Wilson 2011; Palmer 2010; Verhoef et al. 2009; Witell et al. 2019; Zolkiewski et al. 2017). Hollyoake (2009) operationally delineates that customer experiences within business-to-business settings are not differentiated by the relationship or the way customers are managed, but more so by the experience that is developed through the relationship.

In turn, Palmer (2010) accentuates the link between customer experience, customer satisfaction and long-term loyalty, with most research mainly focusing on business-to-customer rather than business-to-business contexts. For the purposes of this study, we refer to this chain as the quality–satisfaction–loyalty–performance causal chain (or paradigm) to aid the economy of our discussion.

The business-to-business marketing literature is increasingly highlighting the importance of multiple perspectives on improving firm performance through enhancing the customer experience – and hence the loyalty of and relationships with customers (Ata & Toker 2012; Hilefana, Roberts-Lombard & Stiehler-Mulder 2020; Magno & Cassia 2019). Within this apparent loyalty–performance paradigm, the empirical investigation of the customer’s experience, particularly during sales interactions, is often overlooked by industrial marketing researchers (Biggeman & Buttle 2009; Evans et al. 2012; Kaski, Niemi & Pullins 2018). This is especially true in contextually sensitive (Nguyen, Barrett & Miller 2011) and customer diverse (Sheth & Sinha 2015) emerging market environments, where there is limited research and knowledge of the customer experience and concomitant long-term loyalty of heterogeneous customer segments in a business-to-business setting (Biggeman & Fam 2011; Gupta, Balmer & Low 2015; Witell et al. 2019). Customer-centric approaches that move beyond the single sales transaction have shown to pave the way for marketers to maximise and pursue customer satisfaction, customer retention and ultimately loyalty (Walter 1999). In addition, customer relationship management researchers have demonstrated that customer recommendations act as a powerful weapon in the competitive arsenal of modern marketers, including emerging markets (Issock, Mpinganjira & Roberts-Lombard 2019; Olaru, Purchase & Peterson 2008; Schreier, Fuchs & Dahl 2012; Van Tonder & Roberts-Lombard 2016).

Business customers’ experiences with a firm shape the nature of the relationship, which could either surpass expectations and satisfy customers or fail to meet expectations resulting in dissatisfied customers (Zolkiewski et al. 2017). Ultimately, this satisfaction, or lack thereof, influences customer loyalty and subsequent actions associated with a loyal customer, such as their willingness to recommend (WTR) the firm to others (Hallowell 1996; Kwiatek, Morgan & Thanasi-Boce 2020). Examining this typical causal chain to explain loyalty brings into question whether we can maintain the current notion to generalise the strength and directionality across heterogeneous business customer segments. Thus, understanding whether such a typical causal model would hold across heterogeneous customer segments provides greater insight into the varying importance of the drivers of loyalty. Ramaseshan, Rabbane and Hui (2013) suggest that the drivers of loyalty in business markets differ greatly, depending on the nature of the targeted customer. In light of this, the primary objective of this study is to investigate if a causal chain to explain WTR holds true across different customer segments, empirically generated as a result of the strategies of a focal firm. The WTR the firm was selected as a proxy measure for loyalty because of the commonly cited understanding that loyal customers are far more likely to engage in recommendations (Ferguson, Paulin & Bergeron 2009; Keiningham et al. 2007a). Given that customer loyalty presents as a multidimensional construct, WTR has often been cited as a proxy measure for sub-dimensions of customer loyalty (Bloemer, De Ruyter & Wetzels 1999; Prayag 2011).

As such, the contribution of this article resides primarily in the notion that although business-to-business marketing has benefitted from the scientific isolation of near-linear causal effects, it is useful to consider the heterogeneity that may exist between groups that could potentially distort assumed linear associations. This should facilitate the development of relationship management strategies and policies that are less inclined to assume a ‘one size fits all’ approach, when considering interactions with a wide range of business customers, with the firm goal still being enhanced financial performance.

In order to achieve this objective, a latent sales interaction experience construct (called Sales Interaction Experience [SIE]) has been used to understand how the customer’s experience during a sales interaction drives both customer satisfaction and WTR, thus maintaining the commonly used satisfaction to recommendation linkage (Aksoy et al. 2011; Keiningham et al. 2007a). In order to provide further insight into the role of these linkages between heterogeneous customer segments, four key theoretical grouping variables have been identified based on the strategies and initiatives of the focal firm. These are groups that are indicative of different market segments, the results of strategy choice by the firm, contractual commitments and the specific types of interaction. In addition, the case-based identification of customer segments was matched to literature using similar groupings in order to further justify their selection.

The rationale for this multi-segment analysis lies in the market heterogeneity that is often experienced in business-to-business markets (Li, Fong & Xu 2011; Pilehvar, Elmaghraby & Gopal 2017). An analysis of these group comparisons seeks to provide further insight into possible differences in the causal linkages between SIE, satisfaction and WTR.

The section to follow provides a synopsis of relevant literature, followed by a methodology that outlines the data collection and analytical procedures employed in the study.
The article then reports the results before drawing conclusions and offering questions for future research.

**Theoretical background**

**Customer experience**

A positive customer experience during the purchasing process contributes to customer satisfaction with the purchase, can enhance customer loyalty to the seller and is a powerful tool in retaining and attracting new customers (De Haan et al. 2015; Olsen 2002). Storbacka, Strandvik and Grönroos (1994) posit that a satisfied customer would create a strong relationship with the seller, which would lead to relationship longevity through customer retention and customer loyalty. Furthermore, Uncles, East and Lomax (2010) have suggested that positive customer experiences are correlated with enhanced customer loyalty and ultimately improve firm performance. Kumar et al. (2013) define customer loyalty as customers who exhibit both behavioural and attitudinal loyalty to a specific trading partner.

As indicated in the ‘Introduction’ section, we postulate that these constructs could sequentially act as drivers which ultimately translate into a WTR the firm to other customers and/or buyers. Although beyond the scope of this particular study, other constructs that also influence WTR have been mentioned in the literature. For example, Olaru et al. (2008) demonstrated the importance of perceived value and its impact on repurchase intentions and WTR. Yet other researchers have suggested that WTR may not be an end in itself. Rather it may, especially in a service setting, influence future willingness to purchase and engage with the counterpart (see, e.g., Aksoy et al. 2011). It is important to note that the key objective is not to create a parsimonious model to explain WTR, but rather to demonstrate the presence and influence of heterogeneity associated with different customer segments. This study seeks to demonstrate the limitations of causal inference across groups. As per Zablah, Bellenger and Johnston (2004:475), customer relationship management is an iterative process which involves the on-going development and leveraging of market intelligence ‘for the purpose of building and maintaining a profit-maximizing portfolio of customer relationships’. With this in mind, the key constructs of this study are operationalised in the following sections to aid development of our conceptual framework.

**Willingness to recommend**

The idea of WTR is common in the customer satisfaction–loyalty literature and is often associated with the work of Reichheld (2003) and the well-known Net Promoter Score (NPS) management tool. Willingness to recommend has received significant attention since Reichheld (2003) established the NPS with a stream of research rekindling the original word-of-mouth research of Richter published in 1966 (Kietzmann & Canhoto 2013). Primarily, the NPS of a firm is considered a metric to gauge customer satisfaction. When customers are happy with a product or a service, they may be more inclined to recommend the product or service to others. In business-to-business marketing literature, the notion of WTR is widely used in healthcare and tourism industries. The concept gained notable traction in developing technology acceptance models (see, e.g. Venkatesh & Bala 2008; Venkatesh, Davis & Morris 2007) and today it frequents business-to-business studies. For example, Kwiatek et al. (2020) noted that the willingness to recommend a supplier results from a positive evaluation of that supplier, thus indicating preference for the supplier. Moreover, these authors (Kwiatek et al. 2020) demonstrated that relationship quality drives the willingness of business-to-business customers to recommend loyalty programmes. Therefore, our use of WTR is consistent with prevailing business-to-business literature (Buttle 1996; Kwiatek et al. 2020; Stocchi, Michaelidou & Micevski 2019).

Customers commonly use word-of-mouth referrals as important sources of information to assist the evaluation of complex business services (Olaru et al. 2008). Research has provided numerous examples of instances in which customers may be inclined to recommend the products or services of another firm. When customers are willing to recommend a product or service to relatives or friends, they do more than indicate that they have received good economic value from a firm; they also put their own reputations at stake (Eisingerich & Bell 2007). Denning (2011) showed that in many of the industries the percentage of customers who were enthusiastic enough to refer a friend or colleague, correlated directly with whether they actually recommended the firm. The relationship between WTR and actual behaviour also appears to be strong. For example, Keiningham et al. (2007b) reported that the likelihood to recommend a firm correlate highly with actual customer behaviour. More explicitly, if customers reported that they were likely to recommend a particular firm to a friend or colleague, these customers were also likely to repurchase from the firm and generate new business through word-of-mouth.

This association between intention and behaviour remains a key reason driving proponents of NPS to recommend it as the most important loyalty measure. The NPS has received much scholarly attention (De Haan et al. 2015; Keiningham et al. 2007b; Kristensen & Eskildsen 2014) and its usefulness is rigorously debated in the business-to-business literature and beyond. Walter (1999) suggests that relationship promoters are often the driving force behind successful customer relationships. Customer satisfaction has been suggested as the primary feeder for positive customer responses about the firm, enhancing one’s WTR the firm.

**Customer satisfaction**

Austen, Herbst and Bertels (2012) established the importance of customer satisfaction in business-to-business marketing by examining the role of satisfaction in repurchase decisions, whereas whilst Cater and Cater (2009) referred to it as a key construct in maintaining business-to-business relationships. Ryding (2010) adopted the earlier approach by Rust and
Oliver (1994), arguing that customer satisfaction is a summary of cognitive and affective reactions to service as a result of experiencing a service quality encounter and comparing that encounter with what was expected. In this instance, experiences that are evaluated as exceeding initial expectations result in satisfaction, whereas experiences that are evaluated as falling short of initial expectations result in dissatisfaction. Their approach, emanating from the services marketing literature, is aligned with the focus of our study, which concerns the customer experience resulting from multiple sales interaction episodes or experiences.

Customer satisfaction brings about many benefits for organisations, with researchers arguing that satisfied customers are less price sensitive, tend to purchase additional products and are less influenced by competitors (see, e.g., Fornell et al. 1996). Furthermore, customer satisfaction has been shown to be a significant driver of repeat purchases, cross-selling opportunities, positive word of mouth, price elasticity and customer loyalty in business-to-business markets specifically (Askarizad & Babakhani 2015; Dick & Basu 1994; Fornell et al. 1996; Naumann, Williams & Khan 2009). To assess whether the same will hold in heterogeneous customer segments, the following hypothesis is proposed:

\( H_1 \): Customer satisfaction (SAT) is positively associated with WTR.

The various points of interaction between buyers and sellers serve as a precursor to developing and maintaining satisfied customers. As previously noted, one’s experiences with a firm, particularly in the business-to-business context, shape the nature of the relationship. Experiences could either surpass expectations and satisfy customers or fail to meet expectations resulting in dissatisfied customers.

Sales interaction experience

The view of many researchers is that customer experience is generated through a process of buyer–seller interactions across multiple channels (Klaus & Maklan 2013). This view acknowledges that these interactions are essential for relationship building and enhancing value creation (Salomonson, Åberg & Allwood 2012). This ‘interactionist perspective’ (Biggeman & Buttle 2009:549) is, therefore, associated with the customer experience: it views interaction as a continuous process of ‘action–evaluation–reaction’ in which the action of one party may initiate further reaction from another. The importance of customer experience in business-to-business relationships has received increasing support in the literature (see, e.g. Hollyoake 2009). It is, therefore, suggested that it is not necessarily the relationship itself, or the way in which customers are managed that establishes differences in customer relationships, most notably in levels of customer satisfaction. But rather, it would appear that it is the interaction experiences that develop as a result of the relationship that is able to influence customer satisfaction. Srivastava and Kaul (2014) established that customer interactions were able to influence customer satisfaction in a business-to-business context, and the current research seeks to extend this to the business-to-business context in light of the critical nature of interactions for relationship building. Román and Martin (2014) further established that customer satisfaction may be determined by the quality of the sales interaction, whereby a more positive experience would result in enhanced customer satisfaction.

Following this line of argumentation, it is proposed that SEEs would influence customer satisfaction. In particular, a series of positive experiences would result in satisfied customers, whereas a series of negative experiences would result in dissatisfied customers. Hosany and Witham (2009) further suggest that the number of opportunities that an individual has to gain interaction experience bears a substantial influence on one’s evaluation of their experience and thus satisfaction or dissatisfaction. The following hypothesis is proposed to test this relationship:

\( H_2 \): Sales interaction experience is positively associated with customer satisfaction (SAT).

Palmer (2010) posits that customer experience, whether positive or negative, results from the interaction with a number of different elements created by the service provider. Further elaborating on these different elements, Verhoef et al. (2009) argue that customer experience captures cognitive evaluations, affective responses, as well as a number of social and physical components. Lemke et al. (2011) further demonstrate that customer experience quality is judged with respect to its contribution made to the value-in-use, and that in assessing experience quality in business-to-business contexts, customers place a greater emphasis on firm practices that focus on understanding and delivering value-in-use.

Ferguson et al. (2009) established that all dimensions of a service experience were associated with customers exhibiting positive word-of-mouth intentions. Hosany and Witham (2009) further examined this relationship by examining the experiences of customers in a business-to-customer context. Their research indicated that not only were satisfied customers more likely to engage in recommendation, but further, that satisfaction acted as a mediator in the relationship between one’s experience and their WTR. In light of this, the following hypothesis is proposed to examine this relationship in a business-to-business context:

\( H_3 \): Sales interaction experience is positively associated with WTR.

The main objective of the current research is to establish whether the above-proposed hypotheses (\( H_1 \)–\( H_3 \)) would hold when tested across a multitude of different customer segments. The rationale for this multi-segment analysis lies in the market heterogeneity that is commonly experienced in business-to-business markets (Pilehvar et al. 2017; Li et al. 2011). As one cannot assume that business customers, differing in terms of a number of market factors, would respond similarly and would exhibit similar levels of loyalty, a multi-segment analysis seeks to evaluate these differences.
Comparing multiple customer segments of the focal firm

Using the focal firm approach, customer segments can be constructed on a number of theoretical perspectives; in the current research, these groups were constructed based on the specific operations of the focal firm. Appendix 1 reports the construction of the various groups along four different theoretical perspectives. These include market factors, the nature of interaction between buyers and sellers, billing strategies, contractual commitments and loyalty programme initiatives. In operational terms, these are factors that are able to influence the loyalty exhibited by customers within the focal firm.

Customer segments

Market factors such as differences between customer segments (Frösén et al. 2016) have shown to influence interaction experiences and loyalty levels. In the current study, the business-to-business context allowed for a distinction to be made between the predominant industries that customers operate in, namely mining industry customers and construction industry customers. These customers make up approximately 95% of the focal firm’s customers. These two particular industries were selected as similar purchases are made for certain application categories. However, it is important to understand that one cannot assume that the needs or preferences of business-to-business customers are homogenous. Traditional segmentation theory used by marketers globally attempts to separate markets based on relevant characteristics with the goal of creating a series of segments each with some common characteristics (Kotler & Armstrong 2014). It is likely that customers operating in different industries may be seeking varying interactions and deriving satisfaction from different interactions with the focal firm. In order to assess this supposition, the following hypothesis is proposed:

H₁: There are significant differences between the path estimates (SAT→WTR; SIE→SAT; SIE→WTR) for mining and construction customers.

Cultural contexts

International marketing literature suggests that customer loyalty experiences can vary across cultural contexts (Lemon & Verhoef 2016; Murphy & Li 2012; Rosenbloom & Larsen 2003; Ryu, Aydin & Noh 2008; Witell et al. 2019). The focal firm operates across multiple countries, and therefore, customer experiences and its subsequent impact on customer loyalty are likely to vary across markets. In the current research, the focal firm’s operations are predominantly located in the South African market. As such, it is imperative to analyse the experiences and subsequent satisfaction of South African firms and non-South African firms. This could provide further insight into the expectations surrounding interaction experiences and subsequent loyalty for local customers versus international customers. In order to test this supposition, the following hypothesis is proposed:

H₂: There are significant differences between the path estimates (SAT→WTR; SIE→SAT; SIE→WTR) for South African and non-South African customers.

Payment terms

Literature demonstrates that the nature of the interaction between buyer and sellers could influence customer behaviour (Biggemann & Buttle 2009; Kim & Choi 2016; Srivastava & Kaul 2014). For example, the advantages and disadvantages of different payment terms, such as cash payments and providing customer credit, are well documented in management literature (Lee & Rhee 2011; Robb & Silver 2006). Whilst cash payments may hold specific benefits for the cash flow and ultimate financial performance of the firm, providing customer credit can reap substantial relational benefits. In order to assess whether the relationships between interaction experience, satisfaction and WTR hold across different customer segments that make use of different payment terms, the following is hypothesised:

H₃: There are significant differences between the path estimates (SAT→WTR; SIE→SAT; SIE→WTR) for cash customers and credit customers.

Billing strategies

In a similar fashion to payment terms, firms employ different billing strategies to ensure that their accounts receivable is managed optimally and that a sound cash flow is maintained (Pfohl & Gomm 2009; Boulaksil & Van Wijk 2018). These billing strategies represent a further interaction variation and as such, it would appear useful to establish whether differences exist between sales order and collection customers (Long Chen 2012; Humphreys, Williams & Goebel 2008). Both types of billing strategies create the opportunity to provide multiple interaction experiences, ultimately influencing satisfaction and WTR. In order to assess whether this would result in significant differences between these groups, the following hypothesis is proposed:

H₄: There are significant differences between the path estimates (SAT→WTR; SIE→SAT; SIE→WTR) for customers who collect their purchases from the focal firm, and customers who use sales orders.

Contractual commitments

The literature on contractual commitments in business-to-business relationships (Seshadri 2013) indicates that customers are often tied to formal contractual arrangements, and this influences their loyalty behaviour. In addition, and consistent with Williams and Naumann (2011) and Yurynets and Tomiuk (2014), it is reasonable to expect that for customers with parent firm contracts management, the focal firm ensures that these relationships are well managed to guarantee their lifelong value. The focal firm in the current research maintains such parent firm contracts as well as equipment management contracts. When a customer is a subsidiary of a larger firm, the focal firm usually establishes a management contract with the parent firm in order to ensure the oversight and management of the contract from a
higher level of authority. For the purpose of this research, these contracts will be referred to as MCC (see Appendix 1) contracts. Equipment management contracts form part of the equipment management project established by the focal firm, whereby the firm is contracted to maintain and manage equipment on behalf of customers. In order to assess whether any potential differences exist amongst these customer segments, the following hypothesis is proposed:

\[ H_1: \text{There are significant differences between the path estimates (SAT} \to \text{WTR; SIE} \to \text{SAT; SIE} \to \text{WTR) for MCC customers and non-MCC customers.} \]

A second loyalty strategy (called NEW100 for the purpose of this study) involves an attempt by the focal firm to differentiate between the best performing customers, based on purchasing volumes and the rest of the customer base. The objective of the loyalty programme is to identify and recruit key accounts to the loyalty programme.

As a result of this interaction, it is likely that those recruited to the programme would exhibit heightened intentions to remain with the focal firm. Our approach is consistent with the findings of Kwiatek et al. (2020) who demonstrated that relationship quality directly results in a longer tenure and WTR only for those who receive KAM treatment will likely have different interaction experiences to those who do not receive such treatment (Abratt & Kelly 2002; Pardo et al. 2006). In order to test this supposition, the following hypothesis is proposed:

\[ H_{1a}: \text{There are significant differences between the path estimates (SAT} \to \text{WTR; SIE} \to \text{SAT; SIE} \to \text{WTR) for equipment management project customers and non-equipment management project customers.} \]

The first of these is based on the well-known NPS, made famous by the work of Harvard scholar Fred Reichheld in 2003 (Reichheld 2003). For the purposes of the current study, the experiences of promoters are noted as being different from detractors. In order to test whether the satisfaction and ultimate WTR differs between promoters and detractors, the following hypothesis is proposed:

\[ H_2: \text{There are significant differences between the path estimates (SAT} \to \text{WTR; SIE} \to \text{SAT; SIE} \to \text{WTR) for promoters and detractors.} \]

\[ H_3: \text{There are significant differences between the path estimates (SAT} \to \text{WTR; SIE} \to \text{SAT; SIE} \to \text{WTR) for KAM customers and non-KAM customers.} \]

As indicated in the preceding section, although these group distinctions enjoy support in the literature, they are derived from the particular context and characteristics of the focal firm and are also specific to a particular market context. In the ‘Methodology’ section, the collection of the data and the analytical procedures to investigate between-group differences are offered.

The relationships suggested by the aforementioned hypotheses are depicted in Figure 1 and provide an overview of how the various constructs are operationalised in the conceptual model. As seen in Figure 1, the study’s conceptual model proposes that customer satisfaction positively influences WTR (H1) and that the SIE can act as a driver to influence customer satisfaction (H2), as well as directly, positively affecting WTR the firm (H3). These hypotheses are proposed to be different for different groups based on the market characteristics (H4 and H5), interaction characteristics (H6 and H7), contractual commitments (H8 and H9) and the firm’s strategy (H10, H11 and H12).

**Methodology**

Whilst maintaining a positivist orientation, the semi-explorative nature of this study promotes the use of a focal
firm in the context as a case analysis. The motivation for this position is based on the notion that if group differences can be observed in a simplified model of customer experience as driver of customer loyalty intentions, it serves as a point of reference for considering further parsimonious and complex models. The focal firm chosen for this purpose is the official dealer for a global brand of construction, mining and industrial machinery range in 11 southern African countries, as well as Spain, Portugal, Siberia and the Russian Far East. Their African customer base includes South Africa, Lesotho, Swaziland, Namibia, Botswana, Angola, Malawi, Mozambique, Zambia and the Democratic Republic of Congo’s Katanga Province. For the purposes of this study, only customers from Africa were considered, and only interactions pertaining to the purchasing of parts were included in an electronic survey. Africa and, in particular, South Africa constitute by far the largest market and investments for the focal firm as 75% of revenue, 61% of operating profits, 69% of operating assets and 80% of employees stem from this geographical area.

The survey consisted of sections adapted from Lemke et al. (2011) as well as Klaus and Maklan (2013). The first of these measured the interaction experience (three items) of the customers during their interaction with sales staff of the focal firm, whereas the second focused on overall customer satisfaction (three items). A third section focused on the intention to recommend the focal firm (3 items) adopted from Bowen and Chen (2001) and Gil-Saura et al. (2009).

Each item was measured using a 10-point Likert-type scale, where 1 = very poor and 10 = excellent. The survey was open for a 3-month period using the full customer base of the focal firm as the sampling frame. A total of 1356 different customers responded to the survey. Closer inspection of the completed surveys revealed a valid sample size of 1004 was suitable for further analysis. Given the number of parameters to estimate in relation to the number of observations, the empirical objective was to make use of an analytical approach that was less sensitive to sample size (Hair et al. 2014). It was, therefore, decided to use a partial least squares path analysis (Hair et al. 2012; Ringle, Wende & Becker 2015) method, a variance-based structural equation modeling technique. The SmartPLS software was selected as the most appropriate software for the analysis. The psychometric properties of the measurement model were first analysed and tested for common method bias, following this the structural model was evaluated. The multi-group analysis (Schloderer, Sarstedt & Ringle 2014; Völkner et al. 2010) was then conducted by employing the procedure of Henseler, Ringle and Sinkovics (2009) to evaluate differences between various customer segments.

Ethical consideration

Ethical clearance was obtained from the Ethics in Research Committee of the Faculty of Commerce at the University of Cape Town. At the time of this study, the University of Cape Town did not issue approval numbers.

Results

Confirming convergent validity, in the measurement model all indicator items loaded as expected with all loadings exceeding 0.7 (Anderson & Gerbing 1988). These factor loadings are presented together with reliability and validity measures in Table 1. The t-values generated by the bootstrapping procedure in SmartPLS all exceeded 1.96, demonstrating the statistical significance of all loadings at a 95% confidence level. Furthermore, the composite reliability and Cronbach’s alpha scores all exceed the 0.7 benchmark (Malhotra 2010). This indicates that the scales exhibit satisfactory internal consistency reliability. Average variance extracted (AVE) exceeds 0.5 for all measures indicating acceptable convergent validity (Hair et al. 2014).

Table 2 confirms that the Fornell and Larcker (1981) criterion for discriminant validity has been met. Discriminant validity is further supported by the AVE scores all exceeding the 0.5 threshold value (Malhotra 2010). The AVE statistics are as follows: WTR = 0.83, SAT = 0.77 and SIE = 0.85.

As the data are pertinent to the field of mining and construction equipment, the test for common method bias using a procedure recommended by Lindell and Whitney (2001) was used. Much like many procedures for common method bias, this procedure has attracted some criticism regarding its conceptualisation (Podsakoff et al. 2003) and its effectiveness (Lance et al. 2010). Nevertheless, it remains widely used, particularly in marketing literature. A marker variable, which is theoretically unrelated to at least one other scale in the measurement instrument, was selected. The correlations amongst constructs were adjusted, and the statistical significance of the adjusted correlations was

<table>
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<tr>
<th>TABLE 1: Factor loadings and reliability measures.</th>
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<td>Composite reliability</td>
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<td>Cronbach’s alpha</td>
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<td>Average variance extracted</td>
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<th>TABLE 2: Latent variable correlations, descriptive statistics and discriminant validity criteria.</th>
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<td>Construct</td>
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<td>Willingness to recommend (WTR)</td>
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<td>Customer satisfaction (SAT)</td>
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<td>Sales interaction experience (SIE)</td>
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SD, standard deviation.
Note: Square root of AVE on diagonal.
determined using the formulae proposed by Lindell and Whitney (2001). This analysis allowed for the construction of a matrix, consistent with Grayson (2007), containing the zero-order correlations and the adjusted correlations on either side of the diagonal. All correlations that were statistically significant \( p < 0.05 \) before the adjustment remained significant thereafter.

These findings suggest that the relationships depicted in the model are unlikely to be inflated because of common method bias.

Following the examination of potential common method bias, the structural model was assessed. Table 3 presented below indicates that all hypothesised paths yielded statistically significant results at a 95% confidence level. For \( H_2, H_4 \) and \( H_6 \), the null hypothesis is rejected in favour of the alternate hypothesis. The model explained 71% \( (R^2 = 0.71) \) of the variance in customer satisfaction and 60% \( (R^2 = 0.60) \) in WTR. These \( R^2 \)-values are considered ‘large’ effects according to the Cohen (1992) criteria.

The multi-group analysis procedure, suggested by Henseler et al. (2007) as extended in Henseler et al. (2009), was used to assess the differences between groups. The procedure employs a bootstrapping approach to calculate the probability of the difference between parameters in subsamples – provided the parameter estimates for subsamples are known. Furthermore, Henseler et al. (2009) state that while this approach may be considered similar to the Mann-Whitney-Wilcoxon test, an additional advantage of this approach is that it does not make distributional assumptions (Henseler et al. 2009). Table 4 reports the results of the Partial Least Squares (PLS) multi-group analysis. This table provides a breakdown of group sizes, reports the absolute difference in the path estimates \((|\beta_1-\beta_2|)\) for each group and the \( p \)-values \( (p \leq 0.05; |\beta_1-\beta_2|) \) associated with observed differences in the path estimations.

From this analysis, it is clear that for \( H_1, H_3 \) and \( H_{10} \) the null hypotheses are rejected in favour of the alternate hypothesis, suggesting that differences were noted across the defined groups. With regard to \( H_5 \) it was found that the relationship between customer satisfaction and WTR was significantly different. \( H_5 \) indicated that significant differences were noted between groups with regard to the relationship between customer satisfaction and WTR. The final significant multigroup result pertains to \( H_{10} \), whereby a significant difference was noted between promoters and detractors with respect to the relationship between SIE and customer satisfaction. For the remaining hypotheses \((H_{1}, H_{2}, H_{4}, H_{5}, H_{6}, H_{11}, \text{ and } H_{12})\) concerning group differences, no significant differences were noted between groups. In sum, the research appears to provide mixed results, whereby differences were noted in relationships for certain groups, but not for all groups. The nature of these results is discussed in further detail below.

### Discussion

Based on the results of the path modelling, the general notion that emerging market business-to-business relationships can be strengthened if customers have positive interaction experiences with the firm has been supported. These results are consistent with various proponents of interaction experiences (Corsaro & Cantù 2015; Biggemann & Buttle 2009). It is suggested that a multitude of positive interaction experiences may enhance the WTR, through which the

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**TABLE 3:** Path analysis results.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>( \beta )</th>
<th>( t )-statistic</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_1 )</td>
<td>SAT(\rightarrow)WTR</td>
<td>0.28</td>
<td>6.39*</td>
<td>Customer satisfaction is positively associated with willingness to recommend.</td>
</tr>
<tr>
<td>( H_2 )</td>
<td>SIE(\rightarrow)SAT</td>
<td>0.84</td>
<td>78.69*</td>
<td>Sales interaction experience is positively associated with customer satisfaction.</td>
</tr>
<tr>
<td>( H_3 )</td>
<td>SIE(\rightarrow)WTR</td>
<td>0.52</td>
<td>11.77*</td>
<td>Sales interaction experience is positively associated with willingness to recommend.</td>
</tr>
</tbody>
</table>

SAT, customer satisfaction; WTR, willingness to recommend; SIE, sales interaction experience.

*Significant at a 1% level.

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**TABLE 4:** Results for PLS multi-group analysis.

| Hypothesis | Path | \( |\beta_1-\beta_2| \) | \( p \leq 0.05; |\beta_1-\beta_2| \) |
|-------------|------|-----------------|-----------------|
| \( H_1 \)   | Mining: 134 (13%) Construction: 870 (87%) | 0.22 | 0.04* |
| \( H_2 \)   | South African: 173 (17%) Non-South African: 831 (83%) | 0.28 | 0.00* |
| \( H_3 \)   | Cash: 785 (88%) Credit: 239 (22%) | 0.13 | 0.10 |
| \( H_4 \)   | Focal: 434 (43%) Sales orders: 770 (75%) | 0.02 | 0.42 |
| \( H_5 \)   | MCC: 815 (81%) Non-MCC: 189 (19%) | 0.06 | 0.71 |
| \( H_6 \)   | EMP: 855 (85%) Non-EMP: 149 (15%) | 0.04 | 0.36 |
| \( H_7 \)   | Promoters: 426 (42%) Detractors: 578 (58%) | 0.07 | 0.78 |
| \( H_8 \)   | NEW100: 202 (20%) Non-NEW100: 802 (80%) | 0.02 | 0.41 |
| \( H_9 \)   | KAM: 533 (53%) Non-KAM: 471 (47%) | 0.09 | 0.16 |

SAT, customer satisfaction; WTR, willingness to recommend; SIE, sales interaction experience; KAM, key account management; MCC, (see Appendix 1); EMP, (see Appendix 1).

*Significant at a 5% level.

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quality of business relationships can be strengthened. This relational strengthening requires a degree of loyalty, and it is, therefore, not surprising to observe that many business-to-business studies employ some form of loyalty measure as a dependent variable (Çater & Çater 2009). This research has demonstrated that overall customer satisfaction is also positively associated with customers’ intention to recommend. This result is consistent with the aforementioned studies in this regard.

With regard to differences in the structural model across empirically derived groups, differences were noted between mining and construction customers. Furthermore, we observed a significant difference in the link from SIE to customer satisfaction between customers that were rated as ‘promoters’ versus those rated as ‘detractors’ or ‘indifferent’ according to the NPS (Reichheld 2003). Net Promoter Score has received considerable research attention in customer service and relationship marketing literature (Keiningham et al. 2007a), as well as in a B2B customer experience context (Zolkiewski et al. 2017), highlighting the complexities of customer interactions and experiences. Despite marketing academics exposing several weaknesses, it remains a practical and strategic tool utilised amongst many managers. Furthermore, literature exploring the efficacy and application of NPS across markets and between customer segments remain sparse. With this in mind, it appears that the distinction between customer segments based on NPS score hold merit as promoters are seemingly more willing to recommend the firm. This intuitive understanding serves as a direct result of service interaction experiences ultimately influencing customer satisfaction.

As it is often the case in research, the non-significant or unexpected results may often yield even better insights.

In the strategy dimension, two more customer loyalty initiatives did not yield significant differences between the empirically derived groups. Firstly, no differences were observed in the path estimates for customers who are placed on the loyalty programme (NEW100) and those customers who are not invited to participate in the programme. The NEW100 programme is specifically designed to promote better customer relationships that lead to higher levels of customer loyalty to ultimately reap the associated benefits for firm performance. However, the research indicates that this differential treatment of customers does not translate into any statistically significant differences in customer WTR the focal firm. In light of this, it may well establish grounds to challenge the usefulness of the loyalty programme of the focal firm. A similar argument can be constructed for customers who are treated as key accounts. The results suggest that key account customers exhibit no differences in the path estimates compared with customers that are not considered key accounts. Again this result brings the efficacy of the KAM system, with a number of resource costs, into question.

Furthermore, no differences were observed for customers holding the MCC and equipment management project contracts. As identified, the MCC contracts are for firms that are subsidiaries of larger firms, often multinational corporations. As a result of the network advantages that these customers have and the governance requirements of their parent companies, the focal firm establishes contracts to ensure the sustainability and strategic orientation of the relationship. In theory, it is expected that because of the importance of the MCC contract, these customers will be treated with great care by the focal firm, and therefore the path estimates may differ from firms that do not have these corporate connections. However, the fact that no such differences were observed raises questions about the focal firm’s ability to isolate these network enabling actors and ensure that they are managed accordingly. Similarly with the equipment management project contracts, the focal firm agrees with certain clients to perform certain equipment management functions on behalf of clients. The lack of observed differences in the path estimates between equipment management project and non-equipment management project customers may further suggest that the advantages of the equipment management project contracts do little to contribute to customer loyalty.

Finally, no differences were observed in the path estimates between cash and credit customers as well as between sales order and collection customers. Arguably, the provision of credit terms is often seen as a reciprocal investment to facilitate easier interaction and strengthen business relationships (Palmatier, Dant & Grewal 2007).

The absence of a differential between credit and cash customers suggests that the usefulness of payment terms as a loyalty instrument should be re-examined. It would be reasonable to expect that customers that enjoy the benefits of payment terms will express their gratitude by recommending the firm. It appears, based on the results of our study, that such an assumption is seemingly ambitious.

The terms and conditions associated with business-to-business relationships, most notably the payment terms, loyalty programmes and contractual commitments are noted as fertile grounds for future researchers. This suggestion is offered on the basis of seemingly unexpected results in light of current literature, which suggested that a number of conditions of the business-to-business relationship would influence satisfaction, ultimately influencing one’s willingness to provide recommendations.

**Theoretical implications**

The exploration of the association between customer experience, satisfaction and loyalty in business-to-business markets benefits from a substantial body of knowledge. The research in this area is driven by the continuous search to understand how firms seek to build stronger customer relationships in their quest for competitive advantage.
Arguably, it would be fair to say that the literature in this area is approaching maturity and therefore our study attempted to explore an alternative view by considering the potential impact of market heterogeneity on the generalisability of a well-embedded casual chain. The causal chain itself, that is, customer experience drives satisfaction that in turn drives loyalty, is not new – especially in its simplified form as used in this study. However, researchers need to continue to test such chains across a variety of contexts in order to grasp how market heterogeneity affects the generalisation of theoretical assumptions. In addition, our model was intentionally simplified to facilitate the test across groups. Future studies may attempt such approaches with more sophisticated theoretical models on both longitudinal and cross-sectional bases.

**Managerial implications**

In business-to-business markets, firms need to understand the nature and circumstances of their customers because of the unique characteristics of the customers acting as organisations and buyers. Our study suggests that the assumption that the linear relationship between customer experience, customer satisfaction and loyalty holds for all market segments a firm may serve, might be flawed. Each business customer may use the service and/or products they purchase in a different fashion and therefore may derive different experiences from it. Also, the circumstances under which each business customer interacts with a supplier may be dissimilar from that of another customer or even a previous interaction episode. Thus, such heterogeneity should not surprise managers and demands their vigilant defences against complacency. Variation across customer segments may, as we have shown, cause the assumptions of how to attain customer loyalty to be limited to particular segments. Therefore, managers need to ensure that their firms acknowledge such differences and guard against generalisations that feed complacency.

**Limitations**

It is imperative to acknowledge the limitations that constrained the current research. A key limitation of the research is the focal firm orientation of the study that is aimed at a specific firm in a specific industry. The focal firm design does not allow for generalisation on the basis of these findings. However, one should further be cognisant of the ability of case study analyses to provide in-depth insight into the specific issues facing firms. The empirical design that was employed has a further limitation as data were collected over a specific 3-month period, and the variance in interactions during this period could not be fully accounted for. The key contribution of this study is that it not only points at potential sources of heterogeneity from an emerging market context, but also within an emerging market context, which, as a result, drives variance in causal modelling of customer loyalty relationships.

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**Competing interests**

The authors have declared that no competing interest exist.

**Authors’ contributions**

All authors contributed equally to this work.

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**Data availability statement**

Data sharing is not applicable to this article as no new data were created or analysed in this study.

**Disclaimer**

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

**References**


Appendix 1

<table>
<thead>
<tr>
<th>Theoretical dimension</th>
<th>Group name</th>
<th>Description</th>
<th>Motivation</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market characteristics</td>
<td>NEWDUS</td>
<td>More than 95% of the customers of the focal firm are in mining or construction. Therefore, mining customers were compared with construction customers.</td>
<td>There may be differences in the types of products and/or services that mining customers purchase – as compared with construction customers.</td>
<td>H₉*: There are significant differences between the path estimates for mining versus construction customers.</td>
</tr>
<tr>
<td></td>
<td>NEWSA</td>
<td>The focal firm conducts its business across multiple country markets. This study included responses from more than clients in the following multiple African countries.</td>
<td>Conventional International marketing literature suggest that customer loyalty experiences can vary across cultural contexts (Murphy &amp; Li 2012; Rosenbloom &amp; Larsen 2003; Ryu et al. 2008)</td>
<td>H₉*: There are significant differences between the path estimates for 'South African' versus 'non-South African' customers.</td>
</tr>
<tr>
<td>Interaction characteristics</td>
<td>NEWCASH</td>
<td>The focal firm distinguishes between customers who pay cash for parts versus customers that use credit.</td>
<td>The advantages and disadvantages of cash payments and providing customer credit are well documented in management literature. Although cash payments may hold specific benefits for the cash flow and ultimate financial performance of the firm, providing customer credit can reap substantial relational benefits.</td>
<td>H₉*: There are significant differences between the path estimates for cash customers versus credit customers.</td>
</tr>
<tr>
<td></td>
<td>NEWBILL</td>
<td>The focal firm distinguishes between customers who prefer to use sales orders, versus customers that collect their parts from the focal firm.</td>
<td>Billing type represents an interaction variation, and it is therefore useful to establish if differences exist between sales order customers and collection customers.</td>
<td>H₉*: There are significant differences between the path estimates for customers who have customers collect their purchases from the focal firm, versus customers who use sales orders.</td>
</tr>
<tr>
<td>Contractual commitments</td>
<td>MCC</td>
<td>Many of the focal firm’s customers are subsidiaries of larger firms. For some of these, the focal firm typically establishes a management contract with the holding firm to ensure that the relationship is also managed at a higher level.</td>
<td>Consistent with Williams and Naumann (2011) and Yurynets and Tomiuk (2014), it is reasonable to expect that for the customers with parent firm contracts management, the focal firm will make especially sure that these relationships are well managed.</td>
<td>H₉*: There are significant differences between the path estimates for 'MCC customers' versus 'non-MCC customers'.</td>
</tr>
<tr>
<td></td>
<td>EMP2</td>
<td>This is another initiative to promote customer relationships, is that the focal firm established so-called equipment management contracts with some customers. Under this project, the focal firm is contracted to maintain and manage equipment on behalf of customers.</td>
<td>Participation in this project suggests that the focal firm extends its services and thereby creates a seemingly deeper form of collaboration with certain customers.</td>
<td>H₉*: There are significant differences between the path estimates for 'equipment management project customers' versus 'non-equipment management project customers'.</td>
</tr>
<tr>
<td>Strategy initiative</td>
<td>LOYCAT2</td>
<td>The focal firm uses conventional methods to calculate Net Promoter Score (NPS) for all its customers. The firm is then able to separate ‘promoter’ customers from ‘detractor’ customers.</td>
<td>The Net Promoter Score has received scholarly attention (Jang et al. 2013; Kristensen &amp; Eskildsen 2014) and its usefulness is rigorously debated in the B2B literature and beyond. It is conceivable that the experiences of promoters are different from detractors.</td>
<td>H₉*: There are significant differences between the path estimates for ‘promoter customers’ versus ‘detractor customers’.</td>
</tr>
<tr>
<td></td>
<td>NEW100</td>
<td>The focal firm has a programme which allegedly differentiates between the best performing customers based on purchasing volumes and the rest of the customer base. Note that it is not limited to 100 customers.</td>
<td>If the loyalty programme meets its objectives, it can be expected that customers who are invited to the loyalty programme exhibit significant differences (higher) to those who are not part of the program.</td>
<td>H₉*: There are significant differences between the path estimates for NEW100 customers versus non-NEW100 customers.</td>
</tr>
<tr>
<td></td>
<td>NEWKAM</td>
<td>In addition to various loyalty programs the focal firm also establish Key Account Management (KAM) arrangements with certain clients.</td>
<td>If the KAM initiative of the focal firm is effective it can be expected that customers that receive the KAM treatment will respond different to those that do not enjoy such treatment.</td>
<td>H₉*: There are significant differences between the path estimates for ‘KAM customers’ versus ‘non KAM’ customers</td>
</tr>
</tbody>
</table>

†, A fictitious name assigned to the programme to protect the identity of the focal firm and facilitate the analytical procedures.