A case for loyalty-based relational business models: Assessing direct – and mediating effects of the Net Promoter Score (NPS) metric in commercial football consumption decisions

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Abstract

Although the Net Promoter Score (NPS) consumer metric as proposed by Reichheld (2003) has been established as a pragmatic commercial revenue indicator in business management, empirical scrutiny of the measure remains limited. Moreover, scholars have criticised the simplistic and generalised approach of NPS; which some argue lack scientific robustness. In this study, an evaluation of the NPS is made in the context of professional football consumerism in South Africa in an effort to evaluate the empirical rigour of the metric. With the theoretical context of loyalty-based business models and relationship marketing as departure point, a measurement and structural model was evaluated with direct paths specified between NPS and consumer expenditure, as well as indirect paths with NPS postulated as a mediator to activate purchasing behaviours in a nomological network that included the traditional sport consumption motives. 2465 adult fans of one of the country's best supported and most established professional football clubs participated in the study. A cross-sectional, exploratory and quantitative research design was utilised. Respondents were requested to complete self-report measures that were uploaded onto a specially designed digital interface made available on the club *Facebook* page. Structural equation modelling was used to assess the research model by evaluating goodness of fit statistics for the measurement model and evaluating direct and indirect paths between the variables under investigation. Results suggested that NPS is a direct predictor of consumer expenditure. It also provided evidence that NPS may mediate between sport consumption motives and expenditure. The results of the study are discussed, with recommendations made for the future.

Keywords: Net Promoter Score (NPS); loyalty-based business model; relationship marketing; sport consumption motives; consumer expenditure; structural equation modelling; mediation; football; South Africa

Introduction

Over the course of the last decade, one of the most thought provoking newly developed revenue generating - and consumer growth indicators has been the Net Promoter Score (NPS) metric proposed by Reichheld (2003). NPS puts forward the idea that consumer loyalty is a tractable and measurable dimension that reflects the potential of a brand to retain and attract customers based on the likelihood of existing buyers recommending the consumption of the brand's product – and service offerings to others (Keiningham *et al.*, 2008; Mecredy, Feetham, & Wright, 2016). Reichheld's theory holds that a simple, elegant probe is enough to ascertain the potential of a brand to increase revenue through sales; and argues that a measurement of the likelihood of an individual consumer advocating for a product's/ service's use to other prospective consumers possesses the inherent reflective potential to indicate future revenue potential (Reichheld, 2003; 2006). This probe is conducted on a single item, reading: "*How likely is it that you would recommend our company/ product/ services to a friend or colleague?*". NPS is based in the theoretical premise of loyalty-based business models and relationship marketing, suggesting that buying decisions of consumers are fundamentally influenced by their cognitive and emotive evaluation of a product or service, which reflects their perceived relationship with the consumable of the brand they are evaluating (Decker, 2016; Morgan & Rego, 2006; Sheth, 2015). This is described accurately by Klaus and Maklan

(2013: 227), when they relate NPS to relationship marketing through observing that the concept describes "the customer's cognitive and affective assessment of all direct and indirect encounters with the firm relating to their purchasing behaviour". In this observation, the loyalty inclination of NPS is revealed, as a customer is likely only prone to recommend a product or service of a company to others if congruence exists between both the affective and cognitive value perceptions of the brand in question (Anselmsson & Bondesson, 2015).

NPS has evoked great debate in business management conversations, receiving praise for its candid yet effective quantification of consumer loyalty and its relative simplicity in understanding at a broad level the potential for development a brand inherently has (Bain and Company, 2011). In this instance NPS has adopted a rather unassuming approach to customer retention and revenue base growth, understanding that customer satisfaction, when repeatedly experienced, will lead to loyalty amongst customers, inspiring advocacy for the brand and ultimately leading to growth in sales overall (Jung, Yoon, & Kim, 2013). Major international firms, such as General Electric, Intuit and T-Mobile have incorporated NPS into their customer satisfaction measurement systems. However, it has been in the academic sphere where opinions on the value of NPS has been largely divided, with some authors arguing the metric lacks empirical robustness and scientific clarity in explaining the complexities of customer consumer decisions. A good example of this can be found in the work of Kristensen and Eskildsen (2013: 203), who have suggested that NPS forms part of a growing number of metrics in consumer management approaches that over-simplify consumer decisions based on utilising scale measurement points that "do not compensate for undesirable response styles". The root of their argument is that consumer decisions, which together architect the customer experience and ultimately informs brand loyalty levels, cannot be evaluated in isolation of a context of other variables that affect the emotive and cognitive processes involved in a purchase decision, as outlined by Klaus and Maklan (2013). Sharp (2006) has noted that the measure has not been exposed enough to scientific scrutiny in a nomological net of evaluation. This view is shared by a number of authors, including Brandt (2007), Shaw (2008) and recently Bendle and Bagga (2016). To truly put the empirical value of NPS to the test, these authors argue, an investigation of its relationship with other key indicators of consumption and revenue growth must be undertaken. In order to position the NPS as both a practical consumer management tool and scientifically valid customer satisfaction metric, it must be rigorously evaluated in the context of related consumption indicators geared towards gauging both affective and cognitive aspects of the consumer buying decision.

It is within this contextual evaluation that a research gap currently exists and subsequently informs the departure point for this paper. Firstly, it is clear that more work is needed in exploring the NPS in relation to other consumer based research phenomena. Secondly, it is important to evaluate the value of NPS in novel consumer research contexts. In this study, an evaluation is made of the value of NPS by relating the concept to the sport consumption setting, scrutinising the possible mediating effects NPS can yield in a buoyant local market consumer sector, namely that of commercial football.

Conceptualising the NPS consumer metric

The origin of NPS is found in the work of Reichheld (2003), who suggested in the *Harvard Business Review* that customer loyalty can be assessed through a one item singularity requesting the customer to rate on a 10-point scale the likelihood of him/ her recommending a product/ service/ brand to a friend or a colleague. This likelihood is clustered into three categories, with a score from 1 to 6 indicating that a consumer will be a "detractor" - , a score of 7 or 8 revealing a "passive" consumer and a score of either 9 or 10 suggesting a "promoter". According to Reichheld (2003), consumers in the promoter category will display high levels of brand loyalty and is likely to actively advocate for the use of the product/ service, whereas detractors will likely not recommend the product/ service to others. Passive consumers will

likely display neither positive nor negative brand/ service/ product advocating behaviours. NPS is calculated as a percentage through a formula by which the percentage of detractors in a sample group of consumers rated is subtracted from the percentage of promoters. This is illustrated in Figure 1.

Figure 1 below specifies the NPS calculation method

NPS = % of Promoters - % of Detractors

Where:

NPS = Total Net Promoter Score value for the entire consumer sample under investigation expressed as a %.

Promoters = Total number of consumers indicating either 9 or 10 (on 10 point scale) in likelihood of recommending the product/ service/ firm to a friend or colleague based on single item probe*.

Detractors = Total number of consumers indicating a score of between 1 and 6 (on 10 point scale) in likelihood of recommending the product/ service/ firm to a friend or colleague based on single item probe*.

* Single item probe: *How likely is it that you would recommend our company/ product/ services to a friend or colleague?*

From an empirical and academic point of view, criticism levelled against the NPS approach has been organised on a number of levels. McDaniel and Gates (2007) have argued that the measure does not account for an "uncertain" or "unsure" response on the part of the consumer, which in standard business metrics assessment should be considered. Grisaffe (2007) as well as Kristensen and Eskildsen (2013) holds the view that the NPS categorisation effort discounts the middle classification of consumer (i.e. the "passive" customer); in this process losing valuable information on the true perception of a part of any consumer sample group. Seal and Moody (2008) criticise what they call the "collapsing" of categories by discarding the passive consumer group in the calculation of NPS. The NPS is an unsophisticated and easily understandable measure, which has enhanced its commercial appeal at a pace not congruent to its empirical evaluation by scholars (Mandal, 2014). This, however, does not mean that the metric cannot yield positive research and academic value. The research gap, and by implication the research opportunity, is to put the NPS approach to the test by exploring it empirically in the nomological network of other consumer focused measures and to evaluate its applicability in novel research contexts (Bendle & Bagga, 2016; Brandt, 2007; Kristensen & Eskildsen, 2013).

The current study

In the current study, this research opportunity is pursued in an effort to further evaluate the empirical value of the NPS. An enquiry is made into the properties of NPS as a direct predictor of consumer expenditure and further as a mediator between an alternative metric and such expenditure. The NPS is explored in a nomological network of sport consumption motives as outlined by Trail and James (2001) and in the context of a sample of South African football fans from one of the country's best supported and most successful professional clubs. This setting was chosen as it represents a flagship development node in the overall tourism and leisure sector, with PricewaterhouseCoopers (2015) estimating that the sport industry will contribute R19.5 billion to the South African economy by 2017 and Chan (2010) projecting the contribution of sport as strong as 2% of total gross domestic production (GDP) per annum. In this buoyant growth context, football represents the pace setting sport, with Saayman and Rossouw (2008) arguing 54% of the entire adult population actively partakes in consumption of the sport and Stander and Van Zyl (2016) commenting that commercial growth forecasts

will continue to significantly surpass the anticipated growth percentage of the country's overall economy.

South African football fans have sustained and even enhanced their expenditure in consuming the sport, their loyal patronage fuelling the attraction of record sponsorships from large firms (Stander, De Beer, & Stander, 2016) and giving effect to the further development of various industries such as retail and manufacturing, media and hospitality servicing and even infrastructure development (De Burca, Brannick & Meenaghan, 2015; Smith & Stewart, 2007; Stander & Van Zyl, 2016). Football officially remains South Africa's most popular consumer sport (Department of Sport and Recreation, 2014) and expenditure has been salient regardless of the increasingly challenging national economic climate. This sustained investment is indicative of the loyalty of South African football fans, ensuring the contextual setting for the current study is ideal as loyalty and relationship marketing forms the bedrock of the NPS philosophy. Adding to that the exploration of NPS in a novel milieu, namely that of academic exploration of NPS in a sport consumerism setting; this study has of goal to contribute to a more robust and empirical understanding of the concept itself.

As far as sport consumerism is concerned, the motivation for sport consumption theory (Trail & James, 2001) serves as the preeminent theoretical framework for the exploration of underlying motives that inform sport consumers' decision to invest resources in their support of a professional club. These authors attempted to address both the affective and cognitive processes that underlie the sport consumer's evaluation of a product and/ or service based on the value the fan derives from having a fundamental need met through his/ her consumption efforts. The theory is a reaction to such probes as that of Sloan (1989) who was one of the early authors to postulate that a fan chooses to consume sport based on a fundamental consumer motivational inclination that is unique to that specific fan. Trail and James (2001) developed and subsequently empirically evaluated eight basic distinct motives for consumption that differentiate the reasons fans would argue produce value for their investment into the consumption of sport – and sport related activities. The motives for sport consumption as put forward by these authors reflect both the affective (or emotive) – and the cognitive (or neutral value evaluation) appraisal fans make when they decide to invest their money into purchasing sport related products of their favourite team and is thus revealing of both the dimensions outlined by authors such as Klaus and Maklan (2013) and Decker (2016). The motivation for sport consumption theory has enabled the differentiation of sport fans' buying rationales, through this making an important contribution to the sports marketing literature (Monfarde, Tojari, & Nikbakhsh, 2014). It has also led to the Motivation Scale for Sport Consumption (MSSC, Trail & James, 2001) becoming a widely used empirical instrument. In Table 1 an overview of the eight dimensions as proposed by Trail and James (2001) are provided, drawing from the most recently available MSSC User Guide (Trail, 2012).

Table 1: *The eight motivational dimensions for sport consumption as per Trail and James (2001)*

Dimension	Dimension description
Vicarious achievement	Sport fans choose to consume sport based on the sense of empowerment, esteem and self-validation it provides them.
Acquisition of knowledge	Sport fans choose to consume sport based on the opportunity to gain new information and knowledge based on player statistics, new developments in their favourite club or general trends.
Aesthetics	Sport fans choose to consume sport based on the artistic value it offers them and due to the appreciation for the inherent beauty and grace of the sport.
Drama/ eustress	Sport fans choose to consume sport based on the pleasurable stress they derive from following a closely contested match or season of which the outcome is uncertain.
Dimension	*Dimension description*
Escape	Sport fans choose to consume sport based on their need to escape from everyday life and stressors, including work stressors and challenges.
Physical attractiveness of players	Sport fans choose to consume sport based on the physical (or "sex") appeal that well-conditioned professional players have.

Physical skill of the players	Sport fans choose to consume sport based on the superior athletic ability and skills of professional players.
Social interaction	Sport fans choose to consume sport based on the experience of community, relatedness and affiliation with other fans who share their passion for a particular club/ team.

For the purpose of the current study, the motives for sport consumption were evaluated in relation to NPS, to compare these latent variables in a nomological network of consumer – and revenue based metrics. It is argued that, grounded on loyalty based business model theory and relationship marketing principles, NPS will directly predict expenditure and will also mediate between the motives for sport consumption and expenditure on the part of sport consumers (i.e. translate these differentiated motives of fans into real and measurable purchasing decisions). The theoretical framework proposed for this study and informed by the loyalty-based and relationship marketing theories is well described by Lee, Trail, Lee, and Schoenstedt (2013:40), who postulate that "how consumers identify themselves in a particular role may influence their respective attitudes and therefore their subsequent consumption behaviours". It is also accentuated by Syracuse (2008:1), who argues: "Avid fans are those that have an emotional connection to the game - people whose interest, enthusiasm, and passion for the product defy the norm. From a marketing standpoint, these individuals are dream customers because they are eager consumers of all things associated with the sport." Finally, it is summarised by DeSarbo and Madrigal (2011:199): "Like any business, the sports industry depends principally on its most avid consumers or fans".

NPS is a direct reflection of the levels of avidity consumers have to a particular brand, product or service offering, as it is expressed in the likelihood of buyers to recommend the product in question to others (Reichheld, 2006; Sheth, 2015). In the context of the current study, and based on loyalty – and relationship marketing theory, it is argued that NPS will directly predict higher levels of total consumer expenditure and also mediate between the motives for sport consumption and expenditure.

Research preamble and hypotheses

Although the NPS metric has received acclaim in commercial settings for its unassuming and simplistic quantification of customer satisfaction and loyalty, its rigour in empirical settings is far from established. This study attempted to address this research gap, by exploring NPS in relation to motives for sport consumption in a contextual setting specific to clearly expressed customer loyalty behaviours (namely that of consumer expenditure in the South African commercial football market; which has been salient regardless of trying economic circumstances).

The study postulates that NPS will directly lead to enhanced expenditure on sport consumption and also mediate the relationship between the primary consumption motives and expenditure in a sample of South African football fans. Based on the theoretical frameworks of loyalty business models and relationship marketing, this study argues:

H1: NPS will predict consumer expenditure in a sample of South African football fans.

H2: NPS will mediate between the sport consumption motives and consumer expenditure in a sample of South African football fans.

Figure 2 specifies the research model
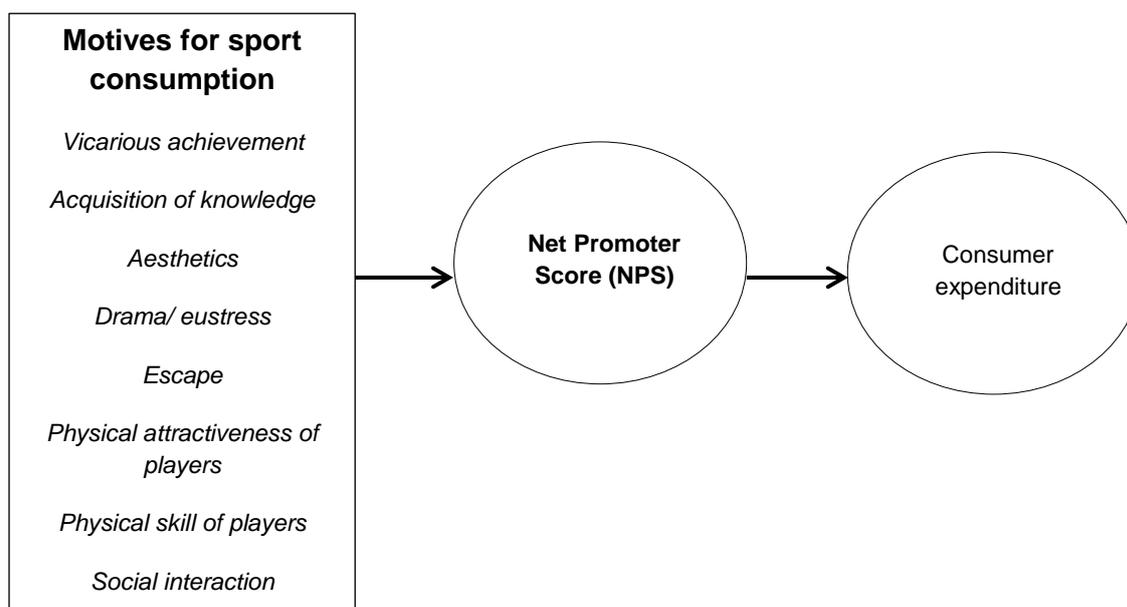
Methodology

Study sample

In the current study, a sample of 2465 football fans of one of South Africa's leading professional clubs, based in the Gauteng province, participated. This club has a history of more than 40 years as participants of the Premier Soccer League (PSL), the country's flagship domestic commercial sports tournament. The fans were all from the same football club, as NPS as a metric is expressed in relation to a singular product/ service offering/ firm/ organisation. From that perspective, the level of likelihood of these fans to recommend supporting of the team to others were scrutinised through NPS. A demographic description of the participating sample is expressed in Table 2.

Table 2: *Characteristics of the participants (N = 2465)*

Variable	Category	Frequency (*f*)	Valid Percentage (%)
Gender	Male	1965	80.3
	Female	483	19.7
Race	Asian	37	1.5
	African	2347	95.3
	Coloured	55	2.2
	White	21	0.9
	Other	3	0.1
Level of Education	Grade 11 and below	353	14.3
	Grade 12	1061	43.1
	Diploma	556	22.6
	Degree	318	12.9
	Post graduate degree	176	7.1
Expenditure categories	R500 or less per annum	697	28.3
	Between R501 and R1000 per annum	936	38.0
	Between R1001 and R1999 per annum	540	21.9
	R2000 or more per annum	291	11.8

Note: Where totals do not add up it is due to missing values

Research approach and procedure

The research approach combined a cross-sectional, exploratory design. A quantitative analysis of the data was undertaken. The research was approached through a survey methodology which is ideal for large samples of participants (Salkind, 2009). A digital platform was designed for the purpose of the study, incorporating all the instruments aimed at assessing the latent variables in question. This platform was uploaded onto the *Facebook* page of the football club under investigation and could be accessed by means of a hyperlink that fans could click on. Formal permission to conduct the research was obtained from the executive management team of the football club under investigation, who also served as gatekeeper to the study and allowed the researcher access to the club *Facebook* page. In terms of ethical requirements, all participating fans were requested to read through and complete an informed consent letter which documented the voluntary and confidential nature of the research. When accessing the hyperlink, fans automatically arrived at this consent letter by means of a landing page. The consent letter stipulated that fans could withdraw from the research at any time. It also explained the aim, nature and purpose of the research study in detail.

Research instruments

Net Promoter Score (NPS): To assess NPS, the measure of Reichheld (2003) was used. This is a single item measure, probing: "How likely is it that you would recommend our company/ product/ services to a friend or colleague?" The NPS is scored on a 10-point scale, where 1 is "not likely at all" and 10 is "very likely". Due to the singularity of the measure's item it is not possible to assess internal consistency.

Motivation for sport consumption: The motives for sport consumption were evaluated by means of the *Motivation Scale for Sport Consumption* (MSSC; Trail & James, 2001). This is a 24-item instrument with three separate items for every dimension of the scale. The MSSC evaluates the differentiating motives that inform the consumption decision on the part of the sport fan. Example items include (in brackets): For vicarious achievement ("I consume the products of my favourite *football team*[1] because it increases my self-esteem), for acquisition of knowledge ("I consume the products of my favourite *football team* because I can increase my knowledge about the activity") for aesthetics ("I consume the products of my favourite *football team* because I like the beauty and grace of the sport"), for drama/ eustress ("I consume the products of my favourite *football team* because I like games where the outcome is uncertain"), for escape ("I consume the products of my favourite *football team* because I can get away from the tension in my life"), for physical attractiveness of the players ("I consume the products of my favourite *football team* because I enjoy watching players who are physically attractive"), for physical skill of the players ("I consume the products of my favourite *football team* because of the athleticism of the players"), for social interaction ("I consume the products of my favourite *football team* because I like to socialise with others"). The instrument is scored on a seven-point Likert scale; responses varying from *strongly disagree* to *strongly agree.* Trail (2012) reported internal consistency of 0.75 to 0.91 for the various MSSC dimensions through Cronbach alpha (α) values. Stander and Van Zyl (2016) also confirmed the reliability of the MSSC in a South African context based on a two-factor dimensionality assessment, with both game-related – and individual factors revealing a 0.86 value for Composite reliability, indicative of high levels of internal consistency.

Consumer expenditure: To assess the level of consumer expenditure amongst the fans, a self-developed biographical item was included in the biographical information requested from participants in the survey loaded onto the digital platform. Participants were requested to

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[1] Football team was used in this study, but the MSSC is flexible in terms of the sporting code under investigation.

indicate the level of their annual expenditure in the consumption of all products related to their favourite club. This included stadium match tickets, merchandise and retail products and all other products/ services available to them through the club. This was scored on a four-point category scale, with responses including *less than R500 per year*, *between R501 and R1000 per year*, *between R1001 and R1999 per year* and *R2000 or more per year*.

Statistical analysis

For purposes of statistical analysis, the SPSS 22 (IBM SPSS Statistics, 2013) and Mplus version 7.3 (Muthén & Muthén 2014) statistical analysis software packages were used, respectively. SPSS 22 was used to process information on the demographic details of the participating sample and for descriptive statistics, relating specifically to the NPS scores and cluster groupings of the sample; which was needed to calculate the total sample NPS as a % score. After this was done, measurement and structural models of the data were specified, incorporating both NPS and motives for sport consumption in the context of the nomological network as alluded to. A measurement model of the data was specified, comparing the traditional eight-factor dimensionality of the sport consumption motives with a one-factor dimensionality and specifying the other latent variables as one-factor structures. Confirmatory factor analysis for factor reliability was implemented. Comparative fit index (CFI) and Tucker-Lewis index (TLI) were utilised to scrutinise fit indices of the models. Satisfactory values were considered at values of 0.90 or higher and a value of under 0.08 for Root mean square error of approximation (RMSEA). This is consistent with the guidelines of Brown (2015).

After specifying the measurement model, a structural model was assessed, informed by the revealed fit statistics of the measurement model. Maximum likelihood estimation of the categorical outcome data was used in Mplus. Rucker, Preacher, Tormala and Petty (2011) state that this is a valid estimation process approach for the data under investigation in this study. The confidence interval of statistical significance was specified at 95% ($p \leq 0.05$); in accordance with the guidelines of Steyn and Swanepoel (2008). Bootstrapping method was used to evaluate indirect effects and to ascertain whether a mediation effect existed between the motives for sport consumption and the consumer expenditure of the fans under investigation through the NPS metric.

Results

Calculating the NPS score of the sample

As a point of departure, the NPS score of the total sample was calculated, making use of the formula proposed by Reichheld (2003). A cluster analysis was undertaken to determine how many fans per consumer group according to NPS groups partook in this study.

Table 3: *NPS clusters from the sample group (N = 2465)*

Category	Descriptor	Frequency (*f*)	Valid Percentage (%)
Promoters	Indicated score of 9 or 10 on NPS scale	1798	75.3
Passives	Indicated score of 7 or 8 on NPS scale	335	13.5
Detractors	Indicated score of 6 or less on NPS scale	271	11.2

Note: Where totals do not add up it is due to missing values

Total NPS = 75.3% - 11.2% = 64.1%

When evaluating total NPS, it becomes clear that the football club under investigation scored high, due to a significant number of promoters (75.3%) found in this particular sample. Only 11.2% of the sample revealed as detractors of the brand under investigation, implying the

majority of participants are likely to actively recommend support of the football club to other people. This confirms the idea proposed by Stander, De Beer and Stander (2016), namely that sport (and football) consumers have sustained their level of expenditure, brand engagement and interest in the support of their team despite slow economic conditions and regardless of consumer pressures in general. It also puts forward a strong case for the contextual specificity of this study as it suggests a loyalty based business model and relationship marketing setting could be useful (Reichheld, 2003, 2014). It provides a logical starting point for the current study as it relates the NPS within client satisfaction measurement context (Mecredy, Feetham, & Wright, 2016). From this perspective scrutiny of the postulated research models followed.

Assessing measurement models

The measurement model with eight factors for the MSSC revealed to be an excellent fit to the data. The following fit indices were shown: CFI = 0.97; TLI = 0.97 and RMSEA = 0.03. Factor loadings of the motivation for consumption motives are communicated in Table 4.

TABLE 4: Factor loadings for the eight consumption motives

Motivation for sport consumption	Item	Standardised Loading	Standard Error	*p*-Value
Vicarious achievement	VA1	0.77	0.02	0.001
	VA2	0.88	0.01	0.001
	VA3	0.81	0.01	0.001
Acquisition of knowledge	AK1	0.71	0.02	0.001
	AK2	0.79	0.02	0.001
	AK3	0.73	0.02	0.001
Aesthetics	AE1	0.68	0.03	0.001
	AE2	0.71	0.02	0.001
	AE3	0.63	0.02	0.001
Drama/ Eustress	DE1	0.61	0.03	0.001
	DE2	0.68	0.03	0.001
	DE3	0.68	0.03	0.001
Escape	ES1	0.78	0.01	0.001
	ES2	0.88	0.01	0.001
	ES3	0.63	0.02	0.001
Physical attractiveness	PA1	0.73	0.01	0.001
	PA2	0.94	0.01	0.001
	PA3	0.68	0.01	0.001
Physical skill	PS1	0.71	0.02	0.001
	PS2	0.84	0.02	0.001
	PS3	0.79	0.02	0.001
Social interaction	SI1	0.82	0.01	0.001
	SI2	0.89	0.01	0.001
	SI3	0.80	0.02	0.001

In terms of factor loadings, all latent indicators for the eight dimensions of sport consumption were acceptable. Analysis of the correlation matrix between variables were undertaken to investigate the relationship of the consumer metrics in the context of a nomological network.

Correlation matrix

Table 5: *Correlation matrix for the latent variables*

Variable name	α	1	2	3	4	5	6	7	8	9	10
						r					
1. Vicarious achievement	0.83	1.00									
2. Acquisition of knowledge	0.70	0.39*	1.00								
3. Aesthetics	0.70	0.48*	0.51**	1.00							
4. Drama/ eustress	0.72	0.19	0.39*	0.37*	1.00						
5. Escape	0.81	0.35*	0.31*	0.32*	0.34*	1.00					
6. Physical attractiveness	0.89	0.28	0.16	0.06	0.18	0.27	1.00				
7. Physical skill	0.86	0.24	0.50**	0.39*	0.31*	0.29	0.23	1.00			
8. Social interaction	0.87	0.32*	0.50**	0.36*	0.30*	0.27	0.23	0.47*	1.00		
9. **Net Promoter Score**	n/a	0.36*	0.37*	0.22	0.08	0.13	0.08	0.17	0.30*	1.00	
10. Consumer expenditure	n/a	0.21	0.15	0.10	0.01	0.06	0.11	0.02	0.16	0.21	1.00

Notes: $p < 0.01$; α = alpha coefficient; *r* = correlation coefficient; * = medium effect; ** = large effect

The correlation matrix reveals important information as far as a comparison of the latent variables in the context of a nomological network is concerned. All correlations were in the direction as expected, with positive correlations between the sport consumption motives, NPS and consumer expenditure. From the perspective of this study and specifically relating to the NPS metric, correlation of medium practical effect was found for the dimensions of vicarious achievement ($r = 0.36$), acquisition of knowledge ($r = 0.37$) and social interaction ($r = 0.30$). This was important from an empiric perspective and the regression paths between the variables were subsequently explored. Reliability for all dimensions were satisfactory with Alpha Cronbach values higher than 0.6 observed for all dimensions.

Regression and indirect paths of the structural model

Table 6: *Regression path of the research model*

Regression paths	Standardised Estimate	Standard Error	*p*
Vicarious achievement → Consumer expenditure	0.14	0.03	0.001*
Acquisition of knowledge → Consumer expenditure	0.10	0.03	0.002*
Aesthetics → Consumer expenditure	0.01	0.03	0.681
Drama/ Eustress → Consumer expenditure	0.05	0.03	0.061
Escape → Consumer expenditure	0.03	0.02	0.207
Physical attractiveness → Consumer expenditure	0.06	0.02	0.009*
Physical skill → Consumer expenditure	0.13	0.03	0.001*
Social interaction → Consumer expenditure	0.11	0.03	0.001*
Vicarious achievement → NPS	0.16	0.03	0.001*
Acquisition of knowledge → NPS	0.16	0.04	0.001*
Aesthetics → NPS	0.05	0.04	0.202
Drama/ Eustress → NPS	0.06	0.03	0.031*
Escape → NPS	0.01	0.03	0.635
Physical attractiveness → NPS	0.01	0.02	0.946
Physical skill → NPS	0.01	0.03	0.649
Social interaction → NPS	0.06	0.03	0.040*
NPS → Consumer expenditure (H1)	**0.16**	**0.02**	**0.001***

* Significant regression path

In terms of the structural paths according to the postulated research model, paths from the motivation for sport consumption motives towards consumer expenditure were specified, as well as a direct path from NPS to expenditure. The latter was done in view of Hypothesis 1, with the former required to establish whether indirect paths in the research model could exist at all (for the purpose of Hypothesis 2; as regression paths between the consumption motives and expenditure would be required for NPS to have a mediating effect on this relationship). Direct paths from the consumption motives to NPS were also scrutinised for purposes of establishing applicability of assessing a mediating effect. Evident from Table 6, a direct and significant regression path was revealed between NPS and consumer expenditure (β = 0.16, SE = 0.02, *p* = 0.001), providing support for Hypothesis 1 of the research and suggesting that NPS has the potential to predict consumer expenditure in the context under investigation. In view of the regression paths between the sport consumption motives and expenditure, statistically significant paths were revealed for all the variables under investigation, with the exception of aesthetics, drama/ eustress and escape. As far as paths between the consumption motives and NPS were concerned, statistically relevant regressions were established from all consumption motives except for escape, physical attractiveness, physical skill and aesthetics. Possible mediating effects were assessed based on the remaining statistically relevant paths between the consumption motives and expenditure; through NPS.

Table 7: *Indirect effects of the structural model*

Paths to consumer expenditure through NPS (mediator)	Estimate	*p*	95% CI	
Vicarious achievement → Consumer expenditure	0.02	0.001	0.02	0.04
Acquisition of knowledge → Consumer expenditure	0.03	0.001	0.01	0.04
Drama/ eustress → Consumer expenditure	0.01	0.04	0.02	0.01
Social interaction → Consumer expenditure	0.01	0.05	0.02	0.02

Notes: p < 0.001; CI = Confidence interval

Discussion

Although the NPS metric as proposed by Reichheld (2003) has evolved into an established and well-known customer satisfaction – and revenue growth indicator in business practice, the robustness of the tool in the scientific and empirical domain remains limited. This study attempted to address this research gap, by evaluating NPS in a novice context of other established consumer revenue indicators. To effect this effort, NPS was compared to the

motivational dimensions for sport consumption as proposed by Trail and James (2001); and within the setting of South African professional football, a salient growth node in the overall context of the country's tourism and leisure sector (Department of Sport and Recreation, 2014; Saayman & Rossouw, 2008; Stander and Van Zyl, 2016). In order to evaluate the scientific rigor of NPS, two hypothetical research paths were evaluated; which subsequently informed the research objectives. Firstly, the direct predicting path of NPS towards total consumer expenditure in the commercial properties of the football club under investigation was undertaken. This was done in an effort to confirm early positive results of NPS in the academic domain, for example through the work of Keiningham *et al.* (2008) as well as Mecredy, Feetham, and Wright (2016). Secondly, and more importantly, the properties of NPS in an overall structural model which incorporated a nomological network of related variables were scrutinised, with a hypothesis postulating that indirect effects will exist through NPS serving as a mediator between the sport consumption motives and total consumer expenditure.

From a statistical perspective and considering some of the criticism against NPS, the current research put in place empirical mitigation. Firstly, the NPS was incorporated into both the measurement and structural models as a continuum variable based on total range of scale, i.e. considering all NPS response scores of the participants. This was done in an effort to a) address the concerns of Kristensen and Eskildsen (2013); who have criticised the disregarding of the passive NPS category cluster as an indicator of revenue growth, b) to counter the "collapse" of certain mid-range score indicators as identified by Seal and Moody (2008) and c) to incorporate also negative response styles or perceptions; which is required for accurate and scientific statistical analysis in business management research (McDaniel & Gates, 2007). Further, the NPS was embedded into a nomological network of related variables, including total consumer expenditure and the motivational dimensions for sport consumption. This was important, as the former is a direct and clear metric of favourable consumer behaviour and the latter is an established revenue business instrument which has been proven as valid and reliable in various empirical studies all over the world (and which was established as valid and reliable in a traditional eight factor model in this research). The nomological network is an empirical net of related variables which have theoretical overlap and should thus be statistically related (Stander & Mostert, 2013; Westen & Rosenthal, 2003). In this research the postulated correlation between the variables was positive in all cases (as anticipated), with correlations of practical medium effect being observed between NPS and a number of the sport consumption motives. Finally, the research evaluated goodness of fit for both the measurement – and structural models investigated, with satisfactory internal consistency and dimensionality being proven through confirmatory factor analysis. This provided a solid statistical and empirical platform to conduct the research from.

In terms of results, support was established for Hypothesis 1, with NPS revealing as a direct predictor of consumer expenditure, thus implying that high levels of NPS will assist businesses/ organisations to enhance revenue growth through positive consumer loyalty and client satisfaction. The research made an important contribution as far as context is concerned as it was the first study to scrutinise the value of NPS in a sport consumerism setting. This evolvement of applicability of NPS in novice contexts is an important part of its establishment as an accepted academic tool (Bendle & Bagga, 2016; Brandt, 2007). Hypothesis 2 was partially supported, as NPS revealed as a mediator between the sport consumption motives of vicarious achievement and knowledge acquisition; and consumer expenditure, with indirect statistics revealing that NPS may have the properties to translate these specific consumer motives into higher levels of direct buying. The testing of indirect paths between the sport consumer motives of drama/ eustress and social interaction to consumer expenditure through NPS (tested based on the overall structural model and regression paths) was inconclusive, thus resulting in only a partial confirmation of Hypothesis 2. However, this support is of importance empirically, as it proposes that NPS has the scientific properties required to be an academic instrument/ measure in research models of nomological relevance.

The study makes an important contribution from the perspective of loyalty-based and relationship marketing theories as it established prediction paths directly from NPS and indirectly between the latent variables investigated. This suggests that NPS has the properties to activate and enhance both the emotive and cognitive evaluations of products/ services that consumers undertake when deciding to engage in positive buying behaviours and outlined by authors Decker (2016), Morgan and Rego (2006), Sheth (2015) and Klaus and Maklan (2013). It is also supported by the conceptuality of the study, which was conducted in the realm of sport fans, a loyal and emotive fraternity of consumer (De Burca, Brannick & Meenaghan, 2015; Stander, De Beer, & Stander, 2016); an applicability which was further supported through the high NPS score of the sample under investigation (64.1%).

Limitations, recommendations, contribution and conclusion

Limitations and recommendations for future research

A number of limitations existed in the study. The cross-sectional nature of the research design does put forward the possibility of common-method bias. Further, NPS is a customer loyalty and – satisfaction metric; which implies a continuum perception. A longitudinal research design could greatly benefit the instrument's academic rigour. It could be useful to assess NPS dynamism amongst consumers over time and also how it changes in relation to other revenue indicators. This will yield a greater understanding of the importance of NPS both from a practical (business) and empirical (academic) point of view. The study was also conducted from a very contextually specific perspective, namely that of commercial football, a buoyant business area in the realm of the South African tourism and leisure sector. Although this is a growth node and thus aligned to loyalty-based and relationship marketing theory, it does represent a narrow set of particulars. Study of the NPS in further novice contexts as proposed by Mecredy, Feetham, and Wright (2016) is thus still recommended. In terms of the cluster groupings of the traditional NPS, this study did attempt to address the concerns of Kristensen and Eskildsen (2013); who have criticised the disregard of the passive NPS cluster consumers in the calculation of overall NPS. This was done by assessing the responses of the current sample on a total range of scale and incorporating those scores into both the measurement – and structural models during statistical analysis. This being said, more can be done to consider the totality of the cluster philosophy of NPS, for example by conducting a group analysis of respondents in the different categories and relating this to desirable consumer outcomes, such as buying.

Contribution and conclusion

The study makes an important contribution from an empirical perspective by exploring the role of NPS in purchasing decisions of consumers in a novice context and by postulating research models related to the NPS in a nomological network of associated phenomena. The study attempted to address a number of the academic concerns raised by scholars who have in the past criticised the NPS calculation method and simplification. Although more needs to be done in this regard, this study did suggest that the NPS may be a useful, valid and reliable metric of business revenue that can be studied academically alongside its commercial evaluations which is on-going. In terms of practical contributions, the study provides useful information for the attention of management teams working in professional football in South Africa. Firstly, it proposed that NPS has the potential to directly predict higher levels of consumer expenditure and patronage amongst football fans. Secondly, results suggested that NPS could potentially mediate the effect of the underlying motives for sport consumption of these fans into real and measurable buying behaviours. The executive leadership teams and staff in the marketing departments of professional football clubs are thus encouraged to follow loyalty-based – and relationship marketing approaches to engage with fans. This should impact positively on customer satisfaction and retention and ultimately increase revenue – kindling growth and

further strengthening the contribution of sport to the tourism – and leisure sector and, ultimately, the economy as a whole.

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