

*Full Length Research Paper*

# Scrutinising the effectiveness of customer loyalty programmes: A study of two large supermarket chains in South Africa

Justin Beneke\*, Simon Blampied, Ryan Cumming and Justin Parkfelt

School of Management Studies, University of Cape Town, South Africa.

Received 11 December, 2014; Accepted 2 March, 2015

There is a worldwide trend toward loyalty marketing, and companies are implementing loyalty strategies aimed at cultivating strong relationships with their customers. Due to this increased importance and relevance that is attached to loyalty programmes, most retailers have been committed to sustaining customer loyalty and cultivating an enduring and favoured relationship with customers who are expected to regularly return for additional purchases. This particular study investigates the effectiveness of two different customer loyalty programmes on customer satisfaction and customer retention, and aims to deduce the most important elements of the programmes that influence customer preferences. Two major supermarket retailers in South Africa, Woolworths and Pick n Pay, were used in the study to determine and compare the effectiveness of the two different types of loyalty programmes. The extant literature suggests that customer loyalty programmes' main objectives are to establish a higher level of customer retention by delivering increased satisfaction and value to certain customers. However, there are a number of critics and studies that suggest that loyalty programmes are wholly ineffective at delivering a competitive value proposition, and merely serve to increasing marketing costs. The contribution of this study gives insight into the effectiveness of different designs of loyalty programmes and, more importantly, points to the elements of the programmes design that influence customer preferences and could be utilized to create the optimal customer loyalty programme.

**Key words:** Customer loyalty programmes, customer satisfaction, customer retention, accumulated point reward programmes, item-based discount reward programmes, retail, South Africa.

## INTRODUCTION

There is a worldwide trend toward loyalty marketing, and companies are implementing loyalty strategies aimed at cultivating strong relationships with their customers (Duffy, 1998). Due to this increased importance and rele-

vance that is attached to loyalty programmes, more retailers have been committed to sustaining customer loyalty and cultivating an enduring and favoured relationship with customers, who are expected to regularly return

\*Corresponding author. E-mail: [Justin.Beneke@uct.ac.za](mailto:Justin.Beneke@uct.ac.za). Tel: +27 21 650 4392. Fax: +27 21 689 7570.

for additional purchases (Dowling and Uncles, 1997). This study investigates the effectiveness of two different customer loyalty programmes on customer satisfaction and customer retention, and aims to deduce the most important elements of the programmes that influence customer preferences (Bridson et al., 2008). The literature of previous studies suggests that customer loyalty programmes' main objectives are to establish a higher level of customer retention by delivering increased satisfaction and value to certain customers (Gable et al., 2006). However, there are a number of critics, such as Shugan (2005), that suggest that loyalty programmes are wholly ineffective at delivering a competitive value proposition, and are merely responsible for increasing marketing costs. The contribution of the following study gives insight into the effectiveness of different designs of loyalty programmes, and aims to determine the elements of the programme's design that influence customer preferences and could conceivably be utilized to create the optimal customer loyalty programme. Furthermore, the effectiveness of each programme on customer satisfaction and retention is explored. This may prove unlightening as there is a dearth of such research in an emerging market context.

The primary aim of this study is to determine the difference in effectiveness of Accumulated Point Reward (APR) and Item-Based Discount (IBD) loyalty programmes on customer retention and customer satisfaction, as well as determine the customers' optimal preferences within a customer loyalty programme. This is contextualised by considering two supermarkets in South Africa, namely Pick n Pay and Woolworths.

More specifically, the research objectives of this study are stated as follows:

1. To determine the customers' optimal preferences of elements within a customer loyalty programme
2. To determine if there is a difference between effectiveness of APR and IBD loyalty programmes in terms of customer satisfaction
3. To determine if there is a difference between the effectiveness of APR and IBD loyalty programmes in terms of customer retention

This paper proceeds by means of a scholarly literature review, an overview of the methodology, discussion of the findings and managerial implications and, finally, a note on the limitations, as well as future research opportunities stemming from the study.

## LITERATURE REVIEW

### Customer loyalty programmes

Customer loyalty programmes are widely defined as an

integrated system of marketing actions that aims to make customers more loyal by developing personalized relationships with them (Sharp and Sharp, 1997; Meyer-Waarden, 2008). These programmes are utilized as value-sharing instruments in order to increase and enhance consumers' perceptions of the firms overall offerings (Bolton et al., 2000; Yi and Jeon, 2003). This value development function is vital because the ability to provide superior value is instrumental to customer relationship initiation and retention (Sirdeshmukh et al., 2002). O'Brien and Jones (1995) stated that enhanced value perception is considered necessary to a loyalty programme's success.

The effectiveness of loyalty programmes has proven to be difficult to empirically deduce and remains a widely debatable subject. There are various researchers that have found positive effects through many different studies (Bolton et al., 2000; Leenheer and Bijmolt, 2008; O'Brien and Jones, 1995), while others have not been able to categorically prove the effects of the systems (Sharp and Sharp, 1997; Dowling and Uncles, 1997).

As a result of the lack of empirical evidence to substantiate these claims, there are a number of limitations and gaps in the literature pertaining to customer loyalty and customer loyalty programmes (Zhang and Breugelmans, 2012). The majority of literature within previous studies suggests that customer loyalty programmes main objectives are to establish a higher level of customer retention by delivering increased satisfaction and value to certain customers.

The effectiveness and value of customer loyalty programmes are heavily influenced by a few key attributes that combine to create the structure and design of the programme. These elements are important as they appeal and relate directly to the preferences of the consumer. As stated by O'Brien and Jones (1995), they are vital measures of the programmes value. The five key attributes that form the basis of the measure of value of any loyalty programme are outlined as follows (O'Brien and Jones, 1995): the cash value of the redemption rewards (ratio of points to purchase, or percentage of discount received); the range of choice of these rewards; the aspirational value of the rewards (accumulated points or cash back); the perceived likelihood of achieving the rewards (e.g. how many points are required to qualify) and the schemes ease of use. Bridson et al. (2008) subsequently explored these elements and also add a further element in the timing of a receiving a reward. These are described as hard, qualitative elements due to their practical application and value (Bridson et al., 2008). It is important to note that these attributes are common to every loyalty programme; however they will vary according to the design requirements and specificity of the firms' value proposition. The ease of use element will not be explicitly included in this study as it is not relevant to the specific programmes being analyzed.

Based on the aforementioned text, it is therefore hypothesized that:

*Hypothesis 1: The importance of individual elements of customer loyalty programmes varies according to consumers' preferences*

The specific elements or attributes of customer loyalty programmes are vitally important as they inherently represent customers' preferences and can be used to measure the success of loyalty programmes. The prevalence of certain elements may represent a greater influence on the systems overall effectiveness on both customer satisfaction and retention. Furthermore, an ideal loyalty programme could be developed using the most significant attributes.

### **Accumulated Point Reward (APR) Loyalty Programmes**

This style of programme allows consumers to accumulate points in order to eventually gain free rewards when they make repeated purchases with a firm, and is therefore aimed towards fostering customer loyalty over a long period of time (Liu, 2007). These programmes are appealing to customers on a cost-benefit analysis, if they are convenient, due to the fact that there is no joining fee and each transaction is handled with an easy-to-use magnetic strip card or membership card (Dowling and Uncles, 1997).

The effectiveness and value of the APR loyalty programme is heavily influenced by a few key elements that combine to create the structure and design of the programme. These elements are important as they appeal and relate directly to the preferences of the consumer, and as stated by O'Brien and Jones (1995), they are vital measures of the programmes value. These attributes have been classified by Bridson et al. (2008) as hard elements due to their qualitative nature. The specific elements which comprise the APR programme are as follows: i) time, which in this case is defined as long term, ii) type of reward, which is clearly accumulated points, iii) reward range, this element relates to the basket of goods that accommodate the accumulation of points, and iv) likelihood of achieving the reward, which relates directly to how many points are required to qualify for the reward. These measures were developed by Bridson et al. (2008) in order to understand and gauge the effectiveness of a loyalty programme with regard to customer satisfaction and retention.

### **Item-Based Discount (IBD) Loyalty Programmes**

This type of loyalty programme is similar to the

Accumulated Point Reward programmes, as the customer is issued with a membership card that is utilized at the point of purchase (Dowling and Uncles, 1997). The key difference of this design, as compared with the accumulated points reward system, is that price discounts for particular individual items replace the points awarded based on the total amount purchased within the store (Zhang and Breugelmans, 2012).

There is research to suggest that consumers prefer immediate rewards over delayed ones (Dowling and Uncles, 1997; Leenheer and Bijmolt, 2008). In addition, the price discount reward is a guaranteed and measurable form of reward for a customer which requires far less effort than accumulating and obtaining points (Zhang and Breugelmans, 2012).

The specific elements, originally based on the literature of O'Brien and Jones (1995) and, more recently, Bridson et al. (2008), which make up the IBD programme are: i) time, which in this case is defined as immediate, ii) type of reward, which is a cash discount, iii) reward range, which is the particular product selected by the store, and iv) likelihood of achieving the reward, which relates to whether selected items that offer discounts are purchased. These elements are similar to the compared system, however it should be noted that the design of the programme dictates their influence on consumers.

The attributes of timing and type of reward clearly play an important role in the design and successful implementation of a customer loyalty programme. In terms of the IBD programme, these attributes could be more heavily impacted by consumer preferences than the other elements previously outlined and therefore could lead to increased customer satisfaction and retention.

### **Customer satisfaction within loyalty programmes**

Customer satisfaction represents an important aspect of a firm's value delivery process, and researchers as well as practitioners recognise it as the main antecedent of loyalty, which in turn influences a firm's profitability (Bodet, 2008; Anderson et al., 1994; Heskett et al., 1994). Therefore, it can be concluded that satisfaction should have a positive effect on both loyalty dimensions and hence customer loyalty (Walsh et al., 2008). According to Lowenstein (1995), retailers can only utilize their marketing tools and programmes to create customer loyalty with customers who are satisfied, which leads to understanding that customer satisfaction cannot be ignored or substituted as dissatisfied customers can do real harm to retailer.

Pertaining to the model described by Yi and Jeon (2003), the value derived from participating in a loyalty programme positively influences satisfaction levels. The authors identified that satisfaction levels with loyalty programmes are directly influenced by benefits of

belonging to the programme. This study recognises measures relating to the customer's choices within the programme, evaluation of the programme, advantages received from the programme and most notably the satisfaction level created by the programme in order to gain an overall satisfaction rating for a customer loyalty programme (Yi and Jeon, 2003).

Based on the aforementioned, the following hypothesis is postulated:

*Hypothesis 2: There is a significant difference between the effect of APR and IBD programmes on customers' satisfaction*

Finally, it is vitally important to note that it cannot be assumed that satisfaction equates to loyalty. Gable et al. (2008) assert that customers may be satisfied, but not loyal, and use the example that customers who regularly shop at the same supermarket over the course of years, and appear to be satisfied, could easily switch to a new store for numerous reasons. Thus, they conclude that loyalty is a relationship based on the overall customer experience. Oliver (1999) substantiates this view and states that both practitioners and academics acknowledge that consumer loyalty and satisfaction are inextricably linked. To this end, most typically satisfied customers are intrinsically progressed towards loyalty as well as retention through the use of marketing tools such as customer loyalty programmes and processes that directly impact the customer experience.

### **Customer retention within loyalty programmes**

Customer retention is commonly viewed as an important and core objective with regard to relationship marketing. Sheth (1996) defines relationship marketing as the retention of profitable customers through the on-going collaborative, partnering and value delivering activities of a firm. The importance and relevance of customer retention is evident is the widely recognised fact that retaining customers is, in aggregate, more cost effective than creating new ones (Gable et al., 2006; Thorsten and Klee, 1997). Thus customer retention has important implications for both the operational and internal processes of a firm as it represents an effective means to increase the overall value of a firm's delivery process.

Customer retention is influenced by a number of key determinants which affect the repurchase intent of a customer. This is substantiated by Keaveny (1995) who found that customers repurchase behaviour varied for many reasons other than satisfaction - including pricing, relative convenience, failures relating to service and experience, responses to these failed service encounters, competition and ethical problems. Each of these determinant influences the construct of customer reten-

tion in a different manner, however the literature (Bolton et al., 2000; Lemon et al., 2002) asserts that satisfaction is the most important and significant aspect in relation to customer retention. Based on the model by Bolton et al. (2000), the re-patronage intention can be measured by the likelihood of the customer recommending, renewing or increasing their usage of a particular loyalty programme. This model is similar to the measurement of customer loyalty programmes on loyalty to the programme as contended by Yi and Yeon (2003). Based on the aforementioned text, it is therefore hypothesized that:

*Hypothesis 3: There is a significant difference between the effect of APR and IBD programmes on customer retention.*

## **METHODOLOGY**

This quantitative study serves to investigate customers' preferential customer loyalty programme in the consumer goods market by using the elements of two customer loyalty programmes, IBD and APR. Furthermore, this study serves to investigate the effectiveness of each loyalty programme on customer satisfaction and customer retention, contextualised by considering two specific supermarkets in South Africa.

### **Research design and method**

This study is of a quantitative research design, lending itself to a descriptive research method (Malhortra, 2010). A quantitative, descriptive research approach gives a general overview of the significance of variables being studied, as well as allowing for specific hypotheses (theoretical assertions) to be empirically tested. In practice, such an approach allows this study to identify which loyalty programme generates a higher level of customer satisfaction and retention, the dependent variables. Here, customers preferences, the attributes or elements of the two programmes, represent the independent variables in the statistical calculations and the indicated preferred loyalty programme represents the dependent variable.

### **Population and sampling**

The target population of this study was broadly defined as users of at least one type of loyalty programme (i.e. APR or IBD). These consumers comprised the population frame. The respondent profile was defined as consumers who were 18 and older and had experience with either, or both, type(s) of programmes. For accurate results, respondents were intercepted, at random, in pre-determined Woolworths and Pick n Pay outlets. In terms of the research context, an example of each loyalty programme needed to be identified. Hence, this study adopted the Pick n Pay Smart Shopper card as the APR programme example and Woolworths W Rewards as the IBD programme example.

### **Fieldwork**

The data for this study were collected using a Mall-intercept method. Structured questionnaires, consisting of 10 questions,

were used in the mall-intercept to collect data. Respondents were assisted, if necessary, throughout the questionnaire by the interviewer to ensure more accurate findings. This technique was appropriate because of the advantages of personal interaction and face-to-face interviews. Certain irregularities within the fieldwork stage were apparent, most relating to the fact that some respondents faced a difficulty in general understanding due to language barriers. Interviewers were on hand to clarify any misunderstandings or misinterpretations and responded to any queries on the spot. This ensured that the response rate was high as questionnaires were completed and collected simultaneously.

### Measurement scales

For questions primarily relating to the research objectives and hypotheses, two separate 7 point Likert scales were used. No reverse coding was required.

Question 3 consisting of V3-V10 was designed to measure consumer preferences towards IBD and APR programmes. V3-V10 and the multi-item 7 point Likert scale were adapted from the previous study compiled by Bridson et al. (2008) as well as O'Brien and Jones (1995) proposed attributes of loyalty programmes. Bridson et al. (2008) obtained a Cronbach alpha score of 0.83 for loyalty programme preferences with regards to hard attributes which was satisfactory as it exceeds 0.7 (Nunnally, 1978). In this study, the hard attributes are timing of reward, type of reward, reward range and likelihood of receiving a reward. Question 4 consisting of question V12 –V20 was designed to measure the effectiveness of an IBD and APR programmes on customer satisfaction and customer retention. Yi and Jeon (2003) and Mimouni-Chaabane and Volle (2008) proposed a 7 point Likert scale to measure the effect of a customer loyalty programme on satisfaction and retention. Bolton et al. (2000) proposed a similar scale to measure the effect of customer loyalty programs on repatronage or retention. Mimouni-Chaabane and Volle (2008) obtained a Cronbach alpha score of 0.92 for satisfaction with a programme. Kannan and Bramlet (2000) obtained a Cronbach alpha score of 0.69 for retention with a programme. Both these scores are satisfactory for reliability.

## RESULTS

The data were initially subjected to reliability and validity testing, as explained in the sections below. Thereafter, hypothesis testing was conducted. The statistical analysis was performed using IBM SPSS 22.

### Cronbach's Alpha

A Cronbach's Alpha or Item reliability analysis is a statistical technique that is used to determine whether a group of items are reliable indicators of the underlying theoretical construct that they are meant to probe (Malhotra, 2010). Basic statistics provides a guide to determine valid internal consistency; it indicates that all Cronbach's Alpha's higher than 0.6 values are accepted as being internally consistent and reliable (Burgess and Steenkamp, 2006). Table 1 represents the Cronbach's Alpha's for the constructs related to the three hypotheses in this study.

Accumulated Point Reward Programme was a construct measured by 4 manifest variables. Table 1 shows a Cronbach's Alpha of 0.712, which suggests that the items have a high internal consistency and are reliable indicators of Accumulated Point Reward Programmes. Item Based Discount Programme, a construct measured by 4 manifest variables had a Cronbach's Alpha of 0.655, suggesting that all 4 manifest variables are reliable indicators of Item Based Discount Programmes. Customer Satisfaction was measured by 4 manifest variables and had a very high Cronbach's Alpha of 0.920 and Customer Retention measured by 5 manifest variables also had a very high Cronbach's Alpha of 0.923; thus suggesting that all manifest variables are perfect indicators of the constructs they were designed to measure.

### Factor analysis

Factor analysis is a statistical technique that examines interrelationships (interdependence) of variables through correlations. Manifest variables that are highly correlated are grouped together to form a new national variable called a factor. A factor is a linear combination of the manifest variables (Malhotra, 2010). Table 2 represents a factor analysis of all the constructs related to the three hypotheses in this study.

Table 2 illustrates the factor loadings of the four constructs. The number of significant factors (number of factors to retain in the factor analysis model) can be chosen using two guidelines. The first being Kaiser's criterion where factors with Eigen values > 1 are retained. The second is looking at the Screen Plot where the Eigen values plotted to level off or the point where the plotted line changes slope.

For Accumulated Point Reward Programme, one factor is retained, with an Eigen value of 2.166 and a cumulative explained variance of 54.2%. For Item Based Discount programmes, Customer Satisfaction and Customer Retention, the same applies, with Eigen values of 1.927 (49.3%), 3.236 (80.1%) and 3.828 (67.6%), respectively. On this basis, the validity of the data was affirmed.

### Hypothesis tests

#### *Hypothesis 1*

The first hypothesis (H1) focuses on the elements of both APR and IBD programmes and how they vary depending on consumers' preferences. These elements are: timing of reward, reward type, reward range and the likelihood of receiving a reward.

The alternative hypothesis is stated below.

*Hypothesis 1: The importance of individual elements of*

**Table 1.** Cronbach's Alpha for constructs.

Variable	Cronbach's Alpha	Cronbach's Alpha of standardized items	No of items
Accumulated Point Reward	.712	.706	4
Item Based Discount	.655	.652	4
Customer Satisfaction	.920	.921	4
Customer Retention	.923	.923	5

**Table 2.** Factor analysis for variables.

Extraction sums of squared loadings			
Variable	Component	Total	Cumulative % of variance
Accumulated Point Reward	1	2.166	54.161
Item Based Discount	1	1.927	49.297
Customer Satisfaction	1	3.236	80.889
Customer Retention	1	3.828	67.567

**Table 3.** Paired sample T-test on each element of both loyalty programmes.

Paired sample statistics		Mean	t	df	Sig. (2-tailed)
Pair 1	V3- Timing of Reward (IBD)	5.33	2.674	150	.008
	V4- Timing of Reward (APR)	4.71			
Pair 2	V5-Reward type (IBD)	5.82	5.069	150	.000
	V6-Reward type (APR)	4.90			
Pair 3	V7-Reward range (IBD)	4.44	-4.314	150	.000
	V8-Reward range (APR)	5.23			
Pair 4	V9- Likelihood of receiving the reward (IBD)	4.72	-1.918	150	.057
	V10- Likelihood of receiving the reward (APR)	5.09			

*customer loyalty programmes vary according to consumers' preferences*

This hypothesis was tested at a 5% level of significance and a paired sample T-test was conducted in order to compare the means of the two different programmes with regards to each element. A Paired Sample T-Test was used as it computes the difference between the two variables (APR and IBD) for each case (each element) and tests to see if the average difference is significantly different to zero (Schloesser, 2000).

In order to perform a paired sample t- test, both variables in each pair have to be normally distributed (Schloesser, 2000). To test for normality a Q-Q plot for each pair was performed. All variables were found to be normally distributed.

Once the T-test was performed, a selection of the variables with the highest mean scores was used to predict the ideal loyalty programme in terms of customer

preferences. Each manifest variable, V3-V10 was measured on a seven point Likert scale.

The results are shown in Table 3.

### Summary of results for H1

Referring to Table 3, it can be seen that Pair 1, Timing of Reward, with a t-stat of 2.674 and a p-value of .008, is significant at a 5% level. Moreover, comparing the means of Pair 1 (5.33 and 4.71), consumers have a preference for V3, the Timing of Reward from an IBD programme.

Pair 2 has a t-stat of 5.069 and a p-value of .000 and is thus significant at a 5% level. Moreover, comparing the means of Pair 2 (5.82 and 4.90), consumers have a preference for V5, the Reward Type, from an IBD programme.

Pair 3 has a t-stat of -4.314 and a p-value of .000 and is thus significant at a 5% level. Moreover, comparing the

means of Pair 3 (4.44 and 5.23), consumers have a preference for V8, the Reward Range from an APR programme.

Pair 4 has a t-stat of -1.918 and a p-value of .057 and it may thus be concluded that Pair 4 is not significant at a 5% level. Moreover, comparing the means of Pair 4 (4.72 and 5.09), consumers have a preference for V10, the Likelihood of receiving the reward from an APR programme. However this information is insignificant as Pair 4 is statistically insignificant and is therefore of little value in the analysis.

In summation, the null hypothesis is therefore rejected at a 5% significance level for Pair 1, 2 and 3. It may therefore be concluded that the importance of individual elements of customer loyalty programmes vary according to consumer preferences. For Pair 4, the element of the likelihood of receiving the award is only significant at a 10% significance level and, thus, at a 5% significance level the null hypothesis cannot be rejected and one can conclude that importance of the likelihood of receiving the award does not vary according to consumer preferences.

In terms of the first research objective (i.e. to determine the customers' optimal preference of elements within a customer loyalty programme), measured at a 5% significance level, only three out of the four elements were validated. The first element is "Timing of Reward". Consumers preferred receiving rewards immediately in store for use there and then, with a mean score of 5.33 out of a possible highest score of 7. The second element is "Reward Type". Consumers preferred receiving cash discounts on certain products that they purchased, with a mean score of 5.82 out of a possible 7. The third element is "Reward Range". Consumers enjoyed receiving rewards based on the value of all the products in basket of goods that they had purchased, with a mean score of 5.23 out of a possible highest score of 7.

In summation, it was found that consumers preferred a loyalty programme that would pay out rewards immediately in store, the rewards being in the form of a cash discount, with this discount based on the value of all the products in the basket of goods purchased.

### **Hypothesis 2**

The second hypothesis (H2) focused on whether there is a significant difference between APR and IBD programmes in terms of customer satisfaction. The alternative hypothesis is stated below.

*Hypothesis 2: There is a significant difference between the effect of APR and IBD programmes on customer satisfaction.*

As this is comparing the difference in effect on customer satisfaction that APR and IBD programmes have, an

Independent Sample T-Test was used as it compares the mean score of two groups (APR and IBD) on a given variable (i.e. customer satisfaction) (Schloesser, 2000).

In order for an Independent Sample T-test to be performed, the following assumptions have to be met (Schloesser, 2000). First, the dependent variable has to be normally distributed. To test for normality, a Q-Q plot for customer satisfaction was plotted and the residuals were found to be normally distributed. The second assumption is that all observations must be independent of each other. To ensure that the observations are independent, each respondent contributes their data independently and in no way was affected by other respondents' scores (Price, 2000). The last assumption is homogeneity of variance. A Levene's test for equality of variances was performed, with a resulting significance of 0.004. Thus, equal variances cannot be assumed, therefore one must report significance from "Equal Variance Not assumed". This is known as a Welch's t-test, an adaption of the T-test intended for use with two samples having unequal variances (Dale, 2012).

The four manifest variables designed to measure customer satisfaction were summated into one scale, labelled Cust\_Satis. The Hypothesis was tested at a 5% significance level and the results are shown in Table 4.

### **Summary of results for H2**

With reference to Table 4, based on the t-value (-4.429) and the p-value ( $0.000 < 0.05$ ), the null hypothesis is rejected at a 5% significance level and it can be concluded that there is a significant difference between the effect of APR and IBD programmes on customers' satisfaction. The mean score for IBD's effect on customer satisfaction (5.6176) is higher than the mean score of APR's (4.7249). Thus it may be concluded that customers who partook in IBD programmes are more satisfied than those who partook in APR programmes.

In addressing the second research objective (i.e. to determine if there is a difference between effectiveness of APR and IBD loyalty programmes in terms of customer satisfaction), measured at a 5% level, it may be concluded that there is indeed a significant difference. Moreover, IBD programmes have a greater effect on customer satisfaction than do APR programmes.

### **Hypothesis 3**

The third hypothesis (H3) focuses on whether there is a significant difference between APR and IBD programmes on customer retention. The alternative hypothesis is stated below.

*Hypothesis 3: There is a significant difference between*

**Table 4.** Independent sample T-test on customer satisfaction.

Cust_Satis	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
1- APR	83	4.7249	1.48124	-4.429	143.185	.000
2- IBD	68	5.6176	.98256			

**Table 5.** Independent sample T-test on customer retention.

Cust_Reten	N	Mean	Std. Deviation	T	df	Sig. (2-tailed)
1- APR	83	4.6012	1.47636	-3.906	149	.000
2- IBD	68	5.4941	1.29452			

*the effect of APR and IBD programmes on customer retention.*

As this is comparing the difference in effect that APR and IBD programmes have on customer retention, an Independent Sample T-Test was used as it compares the mean score of two groups (APR and IBD) on a given variable (customer retention) (Schloesser, 2000).

In order for an Independent Sample T-test to be performed the following assumptions have to be met (Schloesser, 2000). The dependent variable has to be normally distributed. To test for normality, a Q-Q plot for customer retention was plotted and the residuals were found to be normally distributed. The second assumption is that all observations must be independent of each other. To ensure that the observations are independent, each respondent contributed their data independently and in no way was affected by other respondents' scores (Price, 2000). The third and final assumption is homogeneity of variance. A Levene's test for equality of variances was performed with a significance of 0.159, thus Equal variances can be assumed.

The five manifest variables designed to measure customer retention were summated into one scale, labelled Cust\_Reten. The Hypothesis was tested at a 5% significance level and the results are shown in Table 5.

### **Summary of results and findings for H3**

With reference to Table 5, based on the t-value (-3.906) and the p-value ( $0.000 < 0.05$ ), the null hypothesis is rejected on a 5% significance level and it can be concluded that there is a significant difference between the effect of APR and IBD programmes on customer retention. The mean score for IBD's effect on customer satisfaction (5.4941) is higher than the mean score of APR's (4.6012). Thus it can be concluded that consumers who partook in IBD programmes are more likely to be retained than those who partook in APR programmes.

In terms of the third research objective (i.e. to deter-

mine if there is a difference between effectiveness of APR and IBD loyalty programmes in terms of customer retention), measured at a 5% level, it can be concluded that there is indeed a significant difference. Moreover, IBD programmes have a greater effect on customer retention than APR programmes.

## **DISCUSSION AND CONCLUSION**

The main aim of this study was to determine the difference in effectiveness of APR loyalty programmes and IBD loyalty programmes on customer retention and customer satisfaction within specific supermarkets in South Africa, as well as determine the customers' optimal preferences of elements within a customer loyalty programme.

The literature provided valuable insight into the importance of elements and design of loyalty programmes, however appeared to be a gap with regards to actual qualitative evidence of the influence and the importance of each element. Therefore, due to the highlighted importance that the design of a loyalty programme plays (Leenheer and Bijmolt, 2008; Liu and Yang, 2009), it was critical to examine specific elements of the programmes with regard to consumer preferences in order to critically investigate loyalty programmes effectiveness.

The first hypothesis (H1) focused on the elements of both APR and IBD programmes and how they vary depending on consumer preferences. These elements are Timing of reward, Reward type, Reward range and the Likelihood of receiving a reward.

The hypothesis is re-stated below:

*Hypothesis 1: The importance of individual elements of customer loyalty programmes varies according to consumer preferences.*

This hypothesis was tested at a 5% level of significance and a paired sample T-test was conducted in order to compare the means of the two different programmes with

regards to each element. The null hypothesis was rejected and it was concluded that the importance of individual elements of customer loyalty programmes varies according to customer preference.

The above results of the paired sample T-test provide important insight into consumers' preferences with regards to the individual elements of loyalty programmes in South Africa. It is evident that a significant section of consumers preferred the Timing of Reward element which is associated with the IBD programme and therefore represents immediate rewards. Further analysis also revealed that consumers preferred the Type of Reward element associated with IBD programmes which is represented by cash discounts. The last inference which can be gathered from this result is that consumers preferred the element Range of Reward associated with the APR programme, which is a representative of the preference for receiving rewards based on all goods purchased. The element of Likelihood of receiving the Reward, was found to be insignificant on a 5% level. This is most likely explained due to the fact that respondents did not fully understand the question and therefore the data was skewed and did not represent a significant and viable solution on a 5% level. Respondents may have been more likely to have given the APR statement a higher rating due to the wording of the IBD statement being too negative. In summation, it was found that consumers preferred a loyalty programme that would pay out rewards immediately in store, the rewards would in the form of a cash discount and this discount would be based on the value of all the products in the basket of goods they purchased.

The formulation of the second and third hypotheses aimed to build on the literature which states that, in general terms, the goal of these programmes is to establish a higher level of customer retention in profitable segments by providing increased satisfaction and value to certain customers (Gable et al., 2006). The managerial justification for these programmes is that increased customer satisfaction and loyalty have a positive influence on long-term financial performance (Anderson, Fornell, and Lehmann 1994; Reichheld and Sasser 1990). However, there remains a gap in literature as the effectiveness of loyalty programmes has proven to be difficult to empirically deduce and remains to be a widely debatable subject. There are various researchers that have found positive effects through many different studies (Bolton et al., 2000; Leenheer and Bijmolt, 2008; O'Brien and Jones, 1995), while others have not been able to categorically prove the effects of the systems (Sharp and Sharp, 1997; Dowling and Uncles, 1997). Therefore, the second and third hypotheses aimed to target this discrepancy in literature.

The second hypothesis (H2) focused on whether there is a significant difference between APR and IBD programmes in terms of customer satisfaction. The hypothesis is re-stated below:

*Hypothesis 2: There is a significant difference between the effect of APR and IBD programmes on customer satisfaction.*

The results associated with this hypothesis proved that at a 5% level, it can be concluded that there is indeed a significant difference between programmes. Moreover, IBD programmes have a greater effect on customer satisfaction than APR programmes.

This result is strongly supported and significant as the extant literature suggests that consumer prefer immediate rewards over delayed ones (Dowling and Uncles, 1997; Leenheer and Bijmolt, 2008). In addition, the price discount reward is a guaranteed and measurable form of reward for a customer which requires far less effort than accumulating and obtaining points (Zhang and Breugelmans, 2012).

Following the results achieved with regard to APR and IBD systems and their effectiveness with regard to customer satisfaction, it is important to analyze the same programmes effectiveness on customer retention. Bolton et al. (2000) found that customers' decision to repurchase is based on future expectations of the firm's value proposition, and these predictions are influenced by previous satisfaction with the firm. This brings about the important satisfaction-retention linkage.

The third hypothesis (H3) focused on whether there is a significant difference between APR and IBD programmes in terms of customer retention. The hypothesis is re-stated below:

*Hypothesis 3: There is a significant difference between the effect of APR and IBD programmes on customer retention*

The results indicate that at a 5% significance level, there is indeed a significant difference between APR and IBD programmes in terms of customer retention. Moreover, IBD programmes have a greater effect on customer retention than do APR programmes.

This result is, once again, strongly aligned with the extant literature, as it is widely believed that customer satisfaction is often viewed (in terms of relationship marketing) as the central determinant or necessary premise for customer retention (Rust and Zahorik, 1993; Kotler, 1994). Kotler (1994) simply states that customer satisfaction is a key aspect to successfully retaining customers. This clearly represents the important correlation between the results of the two hypotheses and the IBD loyalty programme.

## MANAGERIAL IMPLICATIONS

The first research objective was to determine customers' optimal preference of elements within a customer loyalty programme. It is clear that customers do not want to

collect points over time, they prefer immediate returns and they prefer receiving rewards based on all their particular products in their basket and not merely on selected items. The second research objective was to determine if there is a difference of effectiveness of APR and IBD Loyalty programmes in terms of customer satisfaction. The results found that IBD programmes have a greater effect on customer satisfaction than APR programmes. Marketing managers should implement or change present loyalty programmes to include the elements of IBD programmes or to follow the design considerations of IBD programmes in order to have the greatest effect on customers' satisfaction and, thus, customers' profitability. The third research objective was to determine if there is a difference between effectiveness of APR and IBD loyalty programmes in terms of customer retention. APR programmes are argued in the literature to create a "lock in" affect and are said to be more likely to lead to customer re-patronage than IBD programmes. However, the results of this particular study contradict these findings, as it was found that IBD programmes had a greater effect on customer retention than APR programmes. This may be partially explained by the satisfaction-retention link. Customers who are satisfied with a programme are more likely to continue using the programme, shopping at the store and recommending the programme to others. This underscores the need for marketing managers in the retail sector to follow IBD loyalty programme principles in order to have the greatest effect on customer retention and, thus, customer profitability.

## STUDY LIMITATIONS

The study only took two specific loyalty programmes into consideration. In this respect, Pick n Pay's smart shopper system was chosen for the APR programme and Woolworths W-rewards system was chosen to represent the IBD programme. It is entirely possible that the brand images of these respective companies may have had an effect on responses. Furthermore, these programmes have particular characteristics in their own right and it is conceivable that the innate structure and reward levels may have influenced the specific outcome of this study, as detailed above.

## FUTURE RESEARCH OPPORTUNITIES

At the outset, it should be noted that this research project was limited to South Africa and two major retail chains (i.e. Pick n Pay and Woolworths). Thus, a different market, perhaps considering a developed country, may lead to a different set of results. Likewise, the retail chains under the microscope may also influence the specific outcomes.

The outcome may also be a function of the research design chosen. Future research in the form of an experimental design could look into the effect of each element of loyalty programmes on customer preferences and then attempt to measure the elasticity of each element by changing the reward offering.

Research into the effect of loyalty programmes on profitability is becoming ever more necessary. This necessity is even more prevalent in competitive markets where lots of loyalty programmes exist alongside each other. Firms that provide the most preferential programme to customers stand to gain a substantial competitive advantage. However, does this perceived success really influence the bottom line in a meaningful way? Further studies may shed fresh light on this.

## Conflict of Interests

The authors have not declared any conflict of interests.

## REFERENCES

- Anderson E, Fornell C, Lehmann D (1994). Customer satisfaction, market share, and profitability: findings from Sweden. *J. Market.* 58: 53-66.
- Bodet G (2008). Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. *J. Retail.Consum. Serv.* 15: 156-162.
- Bolton RN, Kannan P, Bramlett MD (2000). Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value. *J. Acad. Market. Sci.* 95-108.
- Bridson K, Evans J, Hickman M (2008). Assessing the relationship between loyalty program attributes, store satisfaction and store loyalty. *J. Retail. Consum. Serv.* 15: 364-374.
- Dale R (2012). Independent Samples t-test. [Online] Available at: <http://cognaction.org/rick/7302/notes/ttest.pdf>
- Dowling GR, Uncles M (1997). Do Customer Loyalty Programs Really Work? *Sloan Manage. Rev.* 38(4): 71-82.
- Duffy DL (1998). Customer Loyalty Strategies. *J. Consum. Market.* 15(5): 435-448.
- Gable M, Fiorito SS, Topol MT (2006). An empirical analysis of the components of retailer customer loyalty programs. *Int. J. Retail. Distrib. Manage.* 36(1): 32-49.
- Heskett J, Jones TO, Loveman GW, Sasser WE, Schlesinger LA (1994). Putting the service-profit chain to work. *Harv. Bus. Rev.* 72(2): 164-174.
- Leenheer J, Bijmolt TH (2008). Which Retailers Adopt a Loyalty Program? An Empirical Study. *J. Retail. Consum. Serv.* 15(6):429-442.
- Lemon KN, White TB, Winer RS (2002). Dynamic Customer relationships Management: Incorporating Future Considerations into the Service Retention Decision. *J. Market.* 66(1): 1-14.
- Liu Y (2007). The Long-Term Impact of Loyalty Programs on Consumer Purchase Behaviour and Loyalty. *J. Market.* 71(4): 19-35.
- Liu Y, Yang R (2009). Competing Loyalty Programs: Impact of Market Saturation, Market Share and Category Expandability. *J. Market.* 73: 93-108.
- Malhortra N (2010). *Marketing Research*, 6th edition. New Jersey: Pearson.
- Meyer-Waarden L (2008). The influence of loyalty programme membership on customer purchase behaviour. *Eur. J. Market.* 42(1/2): 87-114.
- Nunnally J (1978). *Psychometric Theory*. New York: McGraw-Hill.

- O'Brien L, Jones C (1995). Do Rewards really Create Loyalty? *Harv. Bus. Rev.* 73(3):75-82.
- Price DI (2000). Chapter 6: Analysing the Data. [Online] □ Available at: [http://www.une.edu.au/WebStat/unit\\_materials/c6\\_common\\_statistical\\_tests/independent\\_samples\\_t.html](http://www.une.edu.au/WebStat/unit_materials/c6_common_statistical_tests/independent_samples_t.html)
- Rust R, Zahorik A (1993). Customer satisfaction, customer retention and market share. *J. Retail.* 69: 145-156.
- Schloesser N (2000). Independent Samples T Test. [Online] □ Available at: <http://www.wellesley.edu/Psychology/Psych205/indepttest.html>
- Schloesser N (2000). Paired Sample T test. [Online] □ Available at: <http://www.wellesley.edu/Psychology/Psych205/pairttest.html>
- Sharp B, Sharp A (1997). Loyalty programs and their impact on repeat-purchase loyalty patterns. *Int. J. Res. Market.* 14(5): 473-486.
- Shugan S (2005). Brand Loyalty Programs: Are they Shams? *Market. Sci.* pp. 185-193.
- Sirdeshmukh D, Singh J, Sabol B (2002). Consumer Trust, Value and Loyalty in Relational Exchanges. *J. Market.* 66(1):15-37.
- Thorsten H, Klee A (1997). The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development. *Psychol. Market.* 14(8): 737-764.
- Walsh G, Evanschitzky H, Wunderlich M (2008). Identification and the analysis of moderator variables: Investigating the customer satisfaction-loyalty link. *Eur.J. Market.* 42(9/10): 977-1004.
- Yi Y, Jeon H (2003). Effects of Loyalty Programs on Value Perception, Program Loyalty and Brand Loyalty. *J. Acad. Market. Sci.* 31(3):229-240.
- Zhang J, Breugelmans E (2012). The Impact of an Item-Based Loyalty program on Consumer Purchase Behaviour. *J. Market. Res.* 49(1):50-65.