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Citation for published version (APA):

Noordhoff, C. S., Pauwels, P. F. J., & Odekerken-Schröder, G. J. (2004). The Effect of Customer Card Programs: A Comparative Study in Singapore and The Netherlands. *International Journal of Service Industry Management*, *15*(4), 351-364. https://doi.org/10.1108/09564230410552040

Document status and date:
Published: 01/01/2004

DOI:
10.1108/09564230410552040

Document Version:
Publisher's PDF, also known as Version of record

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

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The effect of customer card programs

A comparative study in Singapore and The Netherlands

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Keywords *Loyalty schemes, Retailing, The Netherlands, Singapore*

Abstract *In the service industry, loyalty cards represent an established phenomenon (e.g. hotel and airline industry). Developing this knowledge, the present study focuses on the role of loyalty-card programs in establishing loyalty towards a retail store. The impact of store satisfaction and these loyalty-card programs on store loyalty is tested empirically. Therefore, a survey was performed among 333 grocery store customers in Singapore and The Netherlands. The comparative findings demonstrate that these programs do indeed impact on attitudinal as well as behavioural store loyalty, as long as the number of alternative programs is limited and customers over time have not become accustomed to loyalty cards.*

Introduction

Customer retention can be achieved in two fundamentally different ways (Patterson and Smith, 2003). In a service context, Bendapudi and Berry (1997) make a distinction between constraint and dedication-based loyalty toward a service provider. Constraint-based loyalty refers to companies that erect switching barriers such that the costs of changing to a competing alternative act as obstacles for defection (Knox, 1998). Dedication-based loyalty refers to loyalty based on consumers' sincere interest to stay with the organisation, diminishing their interest in competitive offerings (Dick and Basu, 1994; Jacoby and Chestnut, 1978). In a retailing context, great interest in customer store loyalty prevails as reflected in ongoing academic exploration as well as in the increasing strategic importance of loyalty for retailers (Sopanen, 1996; Flavián *et al.*, 2001). During the year 2000 the top 16 retailers in Europe together spent about $1 billion on retention/loyalty initiatives (Reinartz and Kumar, 2002). Leading global retailers have shifted their emphasis from a retrospective focus on satisfaction to a forward-looking measurement of loyalty as a strategic performance metric (Oliver, 1999).

Retailers' adoption of instruments that aim to increase loyalty has been driven by increasingly advanced technologies that enable companies to obtain and maintain customised relationships with their customers at a reasonable price (Sopanen, 1996). In mature retail markets, the customer card has become an important instrument to increase loyalty (Sharp and Sharp, 1997). Although studies investigating the effects of card-loyalty programs and their tools are scarce, they show mixed results (Liebermann, 1999; Passingham, 1998; Sharp and Sharp, 1997). Moreover, the effectiveness of such programs has been questioned based on difficulties in altering established behaviours and cognitive associations with common types of reward systems (Dowling and Uncles, 1997; Mauri, 2003). Notwithstanding their general adoption and popularity, doubts about the effectiveness of card-loyalty programs remain justified. It is still an

International Journal of Service Industry Management
Vol. 15 No. 4, 2004
pp. 351-364
© Emerald Group Publishing Limited
0956-4233
DOI 10.1108/09564230410552040

open question whether and how card programs affect store loyalty and eventually customer retention.

The relevance of this issue only increases in the light of the current "internationalisation fever" in the retail industry (Gielens and Dekimpe, 2001). Due to low growth opportunities in their maturing home markets, European and US retailers have embarked on a global mission. Today, the world's 100 largest retailers grow twice as fast abroad as domestically (Gielens and Dekimpe, 2001). Most apparent is the rush of many Western European and US retailers into the Asian retailing market (Ganesan, 2001). The choice for Asia seems straightforward since this continent currently offers both high expected economic growth rates and the biggest market size with its population of 3.4 billion (Lamey, 1997; Ganesan, 2001). In particular, it is East Asia where the fastest growing economies are clustered and where major US, Japanese and European retailers are competing fiercely.

Given the internationalisation of retailers, it is critical to investigate and compare the efficacy of retailers' marketing instruments in different markets (Hampton *et al.*, 1984; Wilkie, 1990; Straughan and Albers-Miller, 2001). In this paper, we assess whether and how retailers' card programs affect store loyalty and eventually customer retention in Singapore and The Netherlands. Indeed, loyalty programs and their accompanying marketing tools may evoke distinctive responses when experienced by customers with different cultural backgrounds in different market settings (Maheswaran and Shavitt, 2000; Patterson and Smith, 2003).

This paper empirically assesses the antecedents of store loyalty and especially the effect of loyalty-card programs in a cross-national setting. Thereby, we distinguish between attitudinal and behavioural store loyalty, which is a commonly accepted operationalisation of loyalty (Dick and Basu, 1994). Comparing the effectiveness of card programs in two different market settings, we assess the qualities of this marketing instrument in an international setting. As such, we answer the call for more international and cross-cultural research on consumer behaviour and the cross-national effectiveness of marketing instruments (Maheswaran and Shavitt, 2000).

Store loyalty and national culture

In conceptualising store loyalty, we propose a distinction between behavioural and attitudinal store loyalty. Behavioural store loyalty is expressed by the actual revisiting of the store and the total budget ratio spent at a single store (e.g. De Wulf and Odekerken-Schröder, 2003; Uncles *et al.*, 2003). As a central dependent construct, behavioural store loyalty is still popular even though some authors expressed fundamental criticisms (e.g. Jacoby and Chestnut, 1978; Oliver, 1999; Bloemer and De Ruyter, 1998). In fact, purchase behaviour does not always provide the accurate loyalty measure, given that other moderating variables such as social norms (Ajzen and Fishbein, 1980) and situational factors (Smith and Swinjard, 1983) influence a decision to patronise a store. To understand and predict loyalty better, it is critical to zoom into its attitudinal component (Nguyen and Leblanc, 2001).

Attitudinal loyalty is defined as "the consumer's predisposition towards a store as a function of psychological processes, [which] includes attitudinal preference and commitment towards the store" (Jacoby and Chestnut, 1978, p. 80). Defined as such, the attitudinal concept of store loyalty captures the emotional and mental attachment of a customer to a store (Bennett and Rundle-Thiele, 2002; McGoldrick and Andre, 1997).

While attitudinal loyalty may be considered a mere mediator of marketing instruments that affect behavioural loyalty, its measurement is a prerequisite for the understanding of how stimuli affect cognitive and affective processes that make customers to become or remain loyal in their deeds.

Loyalty is highly culture-bound (Hofstede, 1984; Donthu and Yoo, 1998). In fact, many if not all cultural dimensions (e.g. Hofstede's five-dimensions of culture) directly or indirectly impact on the social role of loyalty, on the emergence of loyalty as well as on the consequences of (dis)loyal behaviour (Straughan and Albers-Miller, 2001; Patterson and Smith, 2003). In the context of the present study, a cultural perspective on Singapore and The Netherlands is expected to reveal sharp differences in the manifestation of store loyalty.

Building on Hofstede's (1984) five cultural dimensions, Matthyssens and Wursten (2003) define six types of cultures that build on six ideal-typical mental images. With a relatively low score on the power distance, uncertainty avoidance and masculinity indices in combination with a relatively high degree of individualism (see Table I), The Netherlands belongs to what Matthyssens and Wursten (2003) call the "network type". In fact, countries comparable to this type are claimed to be driven by consensus which builds on shared mental models that emphasise equality, co-operation, mutual independence and harmonisation of interests between heterogeneous groups (Hofstede, 2001; Matthyssens and Wursten, 2003). Countries expected to be comparable to this type are, among others, Norway, Sweden, Denmark, and The Netherlands. To the contrary, Singapore resembles more what Matthyssens and Wursten (2003) call the "family type". This type is characterised by a combination of relatively high power distance and collectivism, in combination with a relatively low score for uncertainty avoidance (see Table I). Shared mental models in these cultures fundamentally build on attachment to loyalty and hierarchy. In these cultures, there is a strong belief that loyalty will be rewarded by increases in wellbeing (Matthyssens and Wursten, 2003; Patterson and Smith, 2003). Countries expected to be comparable to this type are, among others, Singapore, Thailand, China, and Indonesia.

Building on the characteristics of these two cultural types, it is presumed that loyalty is a more pronounced characteristic of a relationship in the context of the "family type" (Singapore) than in the context of a "network type" (The Netherlands). Owing to the central role of loyalty in the mental models in countries such as Singapore and the emphasis on mutual independence and consensus in The Netherlands, we expect that Singaporean consumers are more loyal – both in attitude and in behaviour – to their retailer as compared to Dutch consumers.

As a consequence, we propose the following hypotheses:

H_{1a}. Singaporean consumers show higher levels of behavioural store loyalty than Dutch consumers.

	Power distance	Individualism	Uncertainty avoidance	Masculinity	Long-term focus
Singapore	75	21	7	47	48
The Netherlands	37	79	53	15	44

Source: Hofstede (2001)

Table I.
Scores per dimension per country

H_{1b}. Singaporean consumers show higher levels of attitudinal store loyalty than Dutch consumers.

Store satisfaction and store loyalty

Oliver (1999, p. 34) describes store satisfaction as "pleasurable fulfilment":

> That is, the consumer senses that consumption fulfils some need, desire, goals or so forth and that this fulfilment is pleasurable. Thus, satisfaction is the consumer's sense that consumption provides outcomes against a standard of pleasure versus displeasure (Oliver, 1999, p. 34).

Store satisfaction has typically been conceptualised as the prime antecedent of store loyalty (e.g. Anderson *et al.*, 1994; Jones *et al.*, 2000). More specifically, for instance Bloemer and De Ruyter (1998) find a relationship between store satisfaction and store loyalty for department stores. Intuitively, it makes sense to assume that also in a grocery retailing setting, customers who are very satisfied with the store would show higher levels of commitment and repurchase behaviour. On the basis of previous empirical findings, it is plausible to assume that store satisfaction positively affects attitudinal and behavioural store loyalty. Therefore, we propose the following hypotheses:

H_2. A positive relationship exists between store satisfaction and behavioural store loyalty in the food-retailing industry in The Netherlands (H_{2a}) and Singapore (H_{2b}).

H_3. A positive relationship exists between store satisfaction and attitudinal store loyalty in the food-retailing industry in The Netherlands (H_{3a}) and Singapore (H_{3b}).

Yet, the relationship between store satisfaction and store loyalty has recently become highly controversial. For example, Oliver (1999) claims that 90 per cent of satisfied customers defect and Reichheld (1996) argues that many organisations have fallen into a "satisfaction trap" in which managers focus on satisfaction at the expense of understanding customer loyalty. Notwithstanding the fact that aforementioned researchers claim store satisfaction to be an unreliable precursor of store loyalty, loyal customers are most characteristically satisfied (Oliver, 1999). Conceivably, it is expected that store satisfaction is a necessary yet insufficient requirement of store loyalty (Oliver, 1999). Pro-active loyalty (-card) programs seem to be required to enhance customer's loyalty and retention.

Loyalty-card programs

The extant literature does not show agreement on the minimal characteristics of a loyalty program. Therefore, we suggest defining a loyalty program as a supplier's structural effort to increase customers' attitudinal and behavioural commitment to the supplier's market offering (Sharp and Sharp, 1997). Consumers perceive this loyalty program as an organised marketing activity which offers (some of) the customers additional rewards or benefits (De Wulf *et al.*, 2003). Defined as such, we acknowledge the behavioural as well as attitudinal component of loyalty.

Loyalty programs principally prevail in consumer markets and supposedly result in customer commitment and retention (Sopanen, 1996). In practice, technology

frequently is the driving force behind these loyalty programs which are increasingly individualised (Reinartz and Kumar, 2002; Uncles *et al.*, 2003). On the basis of advanced database management and analysis, loyalty programs can be optimised at the level of the individual customer (efficacy), directed to the most relevant customers (efficiency) and evaluated on the basis of the individual customer's behaviour.

The loyalty card is a dominant tool in many retailers' loyalty programs (Sharp and Sharp, 1997). From a retailer's perspective, the loyalty card is the prime interface between the retailer's database and the customer. From a customer's perspective, the card is a tool that generates extra rewards. Typically, loyalty-card programs serve three purposes. First, customer cards perform an identification function. Cards of this type have no magnet bar, barcode, or chip and consequently have no database supporting the loyalty program. These type of cards merely function as recognisers. Second, customer cards serve a memory function linking (e.g. demographic) information to the retailer's database. Cards with a limited memory function generally contain a magnet bar registering static information and transferring it to the database. More advanced memory cards register and transfer dynamic information enabling retailers to follow consumer's buying behaviour over time. Third, customer cards are used to reward. Customers can benefit from participation in loyalty-card programs in several ways. Programs offer customers free products, percentage/price reductions, savings, credit facilities, a feeling of belonging, extra information, or any other special treatment sponsored by the retailer (e.g. Roehm *et al.*, 2002). The main barriers for a customer to participate in a loyalty-card program are loss of privacy, loss of control over personal information, cumulative amount of money spent and possible subscription fees (Graeff and Harmon, 2002).

Not only consumers, but also retailers face certain advantages and disadvantages of the adoption of loyalty-card programs. Barriers for retailers can be divided in two sub-groups. The first includes concerns about the effectiveness of the program. Hewitt (1998) and Mauri (2003), for example, argue that loyalty has nothing to do with loyalty-card programs, as customers join many programs simultaneously. Second, retailers may doubt the degree of return on investments. Some researchers state that most loyalty programs are in fact saving programs in disguise that do not contribute to the attitudinal component of loyalty and thus do not create sustained loyalty (Uncles *et al.*, 2003; Bennett and Rundle-Thiele, 2002; Jacoby and Chestnut, 1978).

Among the stimuli to implement a loyalty-card program is the wealth of information it provides to the retailer (Conley, 1998). Loyalty cards make individual purchase history information accessible, enabling sophisticated segmentation that can lead to very precise targeting and enhance the ability to build customer relations (Mauri, 2003). Another advantage of participation in loyalty programs is the potential to fill unused (service) capacity (Kivetz and Simonson, 2003). For example, restaurant discount cards may induce people to patronise the restaurant more frequently at specific times and days, which fills up empty chairs and levels off-peak demand.

Previously, Reichheld (1996) concluded that loyal customers are more profitable than non-loyal customers. Realising this, retailers have invested substantial amounts of money in the introduction of loyalty (card) programs which should increase customer retention rates (Reinartz and Kumar, 2002). Yet, as far as we know, the effectiveness of customer cards on store loyalty has not yet been empirically supported. Moreover, some authors (e.g. Sharp and Sharp, 1997; Jacoby and Chestnut, 1978) have

argued that selective reward behaviour associated with operant conditioning does not lead to vast and lasting loyal behaviour due to a lack of mental processing in customers' minds. This implies that loyalty programs do not qualify as real loyalty programs unless they enhance the attitudinal component.

Therefore, it is constructive to test whether customer card possession relates to store loyalty and whether or not it shows similar effects on behavioural and attitudinal store loyalty. The following hypotheses are proposed to test these relationships:

H_4. In The Netherlands (H_{4a}) and in Singapore (H_{4b}), the possession of a loyalty card of a food-retailing store is positively related to behavioural store loyalty.

H_5. In The Netherlands (H_{5a}) and in Singapore (H_{5b}), the possession of a loyalty card of a food-retailing store is positively related to attitudinal store loyalty.

Apart from the cultural difference between the Netherlands and Singapore (H_1), the Dutch retailer is operating and competing in a fundamentally different business context than the Singaporean retailer. Currently, European food retailers face maturing markets and increased domestic competition (Gielens and Dekimpe, 2001). The European context has brought about a shift in strategic focus away from attracting new (to the business) customers, towards winning competitors' customers and retaining existing customers (Lee and Cunningham, 2001; Reichheld, 1996). In contrast, Asian retailers are in a stage of dramatic business growth (Lamey, 1997). As a consequence, the emphasis of their marketing programs is on winning new to the business customers.

As loyalty-card programs are mainly set up for retention purposes and not for gaining new customers, the difference in the penetration of loyalty-card programs between the two countries is obvious. Indeed, every market-oriented retailer in The Netherlands has a more or less developed loyalty-card program. In Singapore, we are aware of only one major retailer that has recently initiated a comparable program. While this Singaporean program may not be the retailer's most strategically important marketing program, for two reasons we expect it to be more effective than the average Dutch program. First, despite technological advances, the efficacy of these programs is expected to be directly and negatively related to the number of programs in the market. Second, due to customers' habituation with these programs, we expect the efficacy of these programs to decrease with their age. Over the years, customers tend to become insensitive and/or opportunistic towards loyalty programs (Reinartz and Kumar, 2002).

Hence, we propose:

H_{6a}. The relationship between the possession of a customer card and behavioural store loyalty is significantly stronger in Singapore than in The Netherlands.

H_{6b}. The relationship between the possession of a customer card and attitudinal store loyalty is significantly stronger in Singapore than in The Netherlands.

Methodology and results

Measurement

To test the aforementioned hypothesis a survey was designed. The questionnaire consisted of five sections. First, customers were asked to identify the grocery store in

which they spend the biggest share of total household budget reserved for groceries and whether they possess a customer card for the store identified. This part of the questionnaire is based on the behavioural loyalty scale developed by De Wulf and Odekerken-Schröder (2003). The second part consists of a two-item scale measuring behavioural loyalty whereas part three consists of a three-item scale, which is derived from Laroche *et al.* (2003). These authors measure customers' attitudinal responses to general promotional techniques such as buy-one-get-one-free offers and coupons. Although the items as such are applicable in our study, they were adapted to the context of customer-card specific benefits. Finally, part four contains a two-item scale measuring the degree of satisfaction. In line with Bloemer and De Ruyter (1998), customers were asked to specify the degree of satisfaction with the grocery store previously indicated by themselves both with a five-point Likert scale and a percentage scale. The validity of the measures was initially assessed by examining the reliability of the constructs and item-to-total correlation. No items needed to be deleted. Next, the items were factor analysed construct by construct. The purpose of the factor analysis was to test the unidimensionality of the multi-item constructs and to eliminate unreliable items. Again, no items had to be deleted because there were no items loading on multiple constructs or items with low item-to-construct loadings. Table II lists the items corresponding to each factor with the basic descriptive statistics. All three measures demonstrate acceptable degrees of internal consistency for both countries (αs between 0.60 and 0.84).

Additionally, a series of Chow tests (Chow, 1960) was conducted to assess the differential impact of country on the relationship between the possession of a card and behavioural and attitudinal loyalty (H_{6a} and H_{6b}). This procedure uses an F-test to compare whether separate regression models of loyalty for each country are preferable to a single regression model. The F-ratio is determined by equation (1):

$$F\left(k, n-2k\right) = \frac{\left(\mathrm{RSS}_P - \left[\mathrm{RSS}_1 + \mathrm{RSS}_2\right]\right)/k}{(\mathrm{RSS}_1 + \mathrm{RSS}_2)/(n-2k)}. \quad (1)$$

With: k the degrees of freedom; n the number of observations, RSS_p the residual sum of squares from the pooled sample regression; $R\mathrm{SS}_1$ the residual sum of squares from a separate regression on the Singaporean subsample; and RSS_2 the residual sum of squares from the separate regression on the Dutch subsample. A significant F-ratio indicates that the slopes or intercepts differ beyond chance between the groups.

Sample

The data used to perform these tests were collected in The Netherlands and in Singapore using personal interviews based on a structured questionnaire administered in the vicinity of more than 20 retailing stores in Singapore and The Netherlands. Within time-of-the-day, day-of-the-week, and gender quota, interviewers judged shoppers' ages. If a shopper was expected to fit the required age criterion ($>$ 18 years old), interviewers approached the shopper and asked him/her to participate. To minimise possible sampling errors, the Dutch and Singaporean samples were designed as similar as possible (Craig and Douglas, 2000). Therefore, we have aspired to include as many cardholders as non-cardholders. The total sample consists of 333 respondents of which 150 are Singaporean and 183 Dutch. The division between cardholders and non-cardholders is 75 and 75 in Singapore and 97 and 86 in The Netherlands.

Table II.
Items composing the scales

	Items	Retained in final scale S $n = 150$	Retained in final scale NL $n = 183$	Mean S	Mean NL	STD S	STD NL	Min	Max
Behavioural loyalty scale	% budget spent in store	✓	✓	3.05	3.89	1.09	0.98	1	5
	No. of visits to store out of ten shopping trips	✓	✓	3.23	4.07	0.98	0.99	1	5
	Reliability α	0.60	0.75						
Attitudinal loyalty scale	Card giving price reductions impacts feeling of loyalty towards store	✓	✓	4.00	3.13	0.81	1.50	1	5
	Card enabling savings for free or in price-reduced products impacts feeling of loyalty towards store	✓	✓	3.94	2.88	0.91	1.52	1	5
	Card providing services because I possess this card impacts feeling of loyalty towards store	✓	✓	3.74	2.66	0.94	1.43	1	5
	Reliability α	0.70	0.84						
Degree of satisfaction	Store satisfaction	✓	✓	3.74	3.80	0.71	0.90	1	5
	Percentage of store satisfaction	✓	✓	3.64	3.89	0.63	0.80	1	5
	Reliability α	0.77	0.82						

The Singaporean sample consisted of 51 male and 99 female respondents, whereas the Dutch sample was more equally spread with respect to gender (87 male versus 96 female). We distinguished five age categories: 18-24, 25-34, 35-49, 50-64 and older than 64. In our Singaporean sample respectively 33.3, 34.7, 22.7, 6.7 and 2.7 per cent of our respondents represented the respective age categories, while in our Dutch sample these age categories were represented by respectively 14.8, 28.4, 32.8, 19.7 and 4.4 per cent of the respondents.

Results

The effect of national culture on store loyalty was examined by an independent sample *t*-test in which we specified behavioural and attitudinal store loyalty as test variables and national culture as grouping variable. Although higher, we found that the mean for behavioural store loyalty in the Dutch sample is not significantly different from the mean in the Singaporean sample ($\mu_{\text{Netherlands}} = 3.72$, $\mu_{\text{Singapore}} = 2.92$, $F = 0.256$, $p \leq 0.62$). Consequently, H_{1a} can not be supported (see Table III). Contrary, we found the mean score for attitudinal store loyalty to be significantly higher for the Singaporean sample as compared to the Dutch sample ($\mu_{\text{Netherlands}} = 2.89$, $\mu_{\text{Singapore}} = 3.89$, $F = 78.50$, $p \leq 0.001$). Thus, H_{1b} is supported (see Table III).

Next, we checked the direct effect of satisfaction on store loyalty. We expected a positive relationship between these two variables both in Singapore and The Netherlands. However, the data show that this is only true for Singapore. Specifically, satisfaction is positively related to both behavioural store loyalty ($B = 0.36$, $t = 4.61$, $p \leq 0.00$) and attitudinal store loyalty ($B = 0.15$, $t = 1.77$, $p \leq 0.10$) in Singapore. This was not found for the Dutch sample where the relationship between satisfaction and behavioural store loyalty ($B = 0.11$, $t = 1.51$, $p \leq 0.14$) and attitudinal store loyalty ($B = 0.10$, $t = 1.36$, $p \leq 0.18$) was insignificant.

The expected effect of card possession on store loyalty was tested by means of regression analyses. The regression analyses for the Dutch respondents reveal that loyalty-card possession has a significant positive effect on attitudinal loyalty ($B = 0.23$, $t = 3.14$, $p \leq 0.01$), but is unrelated to behavioural loyalty ($B = 0.10$, $t = 1.40$, $p \leq 0.17$). Thus, the hypothesised positive effect of customer-card possession on behavioural store loyalty among Dutch consumers is not supported. In contrast, the hypothesised positive effect of customer-card possession on attitudinal store loyalty is supported. Moreover, loyalty-card possession has, as hypothesised, a positive influence on both behavioural loyalty ($B = 0.18$, $t = 2.21$, $p \leq 0.05$) and attitudinal loyalty in Singapore ($B = 0.14$, $t = 1.73$, $p \leq 0.10$). This provides support for H_{4b} and H_{5b} (see Table III).

As shown in Table IV, the results of the series of Chow's tests provide further indication of cross-national variations with respect to the effect of customer card on attitudinal and behavioural loyalty. Both *F*-ratios are significant at the 0.1 per cent level. This implies that H_{6a} and H_{6b} can be supported and it can be stated that there are significant differences between Singapore and The Netherlands regarding the role that customer-card possession plays in affecting attitudinal and behavioural loyalty.

Discussion and managerial implications

The present study focuses on the relationship between the possession of loyalty-cards and affective and behavioural store loyalty. This study is legitimate as store

	Dependent	Independent	Beta	*T*-score	*p*-value	R^2(adj.)	Mean NL	Mean S	*F*-ratio	Sign.	Conclusion
H_{1a} (Beh)							3.72	2.92	0.256	0.613	No support
H_{1b} (Att)							2.89	3.89	78.493	0.00	Support
H_{2a} (NL)	Behavioural loyalty	Satisfaction	0.11	1.51	0.13	0.013 (0.007)					No support
H_{2b} (S)	Behavioural loyalty	Satisfaction	0.36	4.61***	0.00	0.132 (0.126)					Support
H_{3a} (NL)	Attitudinal loyalty	Satisfaction	0.10	1.36	0.17	0.010 (0.005)					No support
H_{3b} (S)	Attitudinal loyalty	Satisfaction	0.15	1.77*	0.08	0.022 (0.015)					Support
H_{4a} (NL)	Behavioural loyalty	Card possession	0.10	1.40	0.16	0.010 (0.005)					No support
H_{4b} (S)	Behavioural loyalty	Card possession	0.18	2.21**	0.03	0.032 (0.025)					Support
H_{5a} (NL)	Attitudinal loyalty	Card possession	0.23	3.14***	0.00	0.052 (0.047)					Support
H_{5b} (S)	Attitudinal loyalty	Card possession	0.14	1.73*	0.09	0.020 (0.013)					Support

Notes: * Significant at $p \leq 0.10$; ** Significant at $p \leq 0.05$; *** Significant at $p \leq 0.01$

Table III.
Statistics for hypotheses

satisfaction – a prime antecedent of loyalty – is no longer considered to be a sufficient antecedent for store loyalty (Reichheld, 1996; Oliver, 1999). In fact, pro-active loyalty programs such as loyalty-cards seem to be essential to enhance a retailer's store loyalty beyond the business average. However, it remains unclear to what extent these loyalty programs structurally enhance store loyalty. A prerequisite for a structural change in loyalty is that behavioural and attitudinal loyalty are both significantly affected (Bennett and Rundle-Thiele, 2002; McGoldrick and Andre, 1997). In the context of the current internationalisation trend in the retailing industry, we assess the stability of these relationships across cultural borders and in two fundamentally different business contexts: Singapore and The Netherlands.

Initial analysis shows partial support for H_1. In general, attitudinal loyalty of Singaporean customers to their most preferred store is significantly higher than the attitudinal loyalty of the Dutch customer. However, in contrast to what was expected, this difference could not be confirmed in the case of behavioural loyalty. Although this finding needs further investigation, the insignificant difference with respect to behavioural loyalty may be related to the attitudinal/mental underpinning of the typology of cultures (Matthyssens and Wursten, 2003). In fact, we distinguished between The Netherlands and Singapore on the basis of fundamentally different mindsets, not on the basis of behavioural difference.

Concerning H_2 and H_3 analysis shows that store satisfaction has a positive effect both on behavioural and attitudinal store loyalty in Singapore, thereby supporting the respective hypotheses. In contrast to what was hypothesised, this was not the case in The Netherlands. In the Dutch context, store satisfaction was not significantly related to attitudinal or behavioural loyalty. This might be explained by the changing role of store satisfaction in the explanation of loyalty (Reichheld, 1996; Oliver, 1999). While store satisfaction may be a key success factor in a pre-mature and growing retailing industry, it becomes a qualifier once the industry reaches maturity (Jüttner and Wherli, 1994; Bitner *et al.*, 1998). This is comparable to the evolution in the role of perceived quality – from key success factor to qualifier – in many product industries (Grunert and Hildebrandt, 2004). As a qualifier store satisfaction may no longer explain a large proportion of store loyalty. The question remains, however, how store dissatisfaction would impact store disloyalty (Buttle and Burton, 2002).

Testing H_4 and H_5, we assess the relationship between loyalty-card possession and behavioural and attitudinal loyalty. Again, both hypotheses are supported in the Singaporean context. In The Netherlands, however, only the impact of card possession on attitudinal loyalty is confirmed. Moreover, H_6 is supported, which means that the impact of loyalty-card possession on both behavioural and attitudinal loyalty is significantly higher in Singapore compared to The Netherlands. Although we expected a positive relationship between card possession and behavioural loyalty in The Netherlands, the tests on H_4, H_5 and H_6 largely confirm the idea that the efficacy of loyalty-card programs erodes with their age and the increasing number of competitive programs. Another potential reason for the positive relationships between loyalty-card

Table IV. Summary of the Chow tests results

Hypothesis	Regression equation	*F*-ratio	*p*-value	Conclusion
H_{6a}	Possession of card → behavioural loyalty	30.68	0.001	Support
H_{6b}	Possession of card → attitudinal loyalty	41.6	0.001	Support

programs and behavioural as well as attitudinal loyalty in Singapore may be found in the Asian economic crisis that took place during the late 1990s. This crisis may have induced increased price consciousness and sensitivity to price reductions. Hence, Singaporean customers may have become behaviourally and attitudinally loyal to stores that make them save them money in one way or another.

This study presents relevant managerial insights. Foremost, it supports the idea that store loyalty-card programs impact upon behavioural as well as affective loyalty. More specifically, however, a comparison of the results in the two countries seems to suggest that the efficacy of these programs follows a life cycle pattern. The efficacy of store loyalty-card programs appears to diminish with an increasing number of alternative card programs in the market, as well as with the habituation of customers with these cards. Moreover, yet only indicative, the Dutch results seem to suggest that the impact of these programs on attitudinal loyalty is more long-standing that their effect on behavioural loyalty.

While interesting and managerially relevant results were found, the present study has only touched on the explanation of attitudinal and behavioural store loyalty. For instance, the relationships between satisfaction, retention programs and store loyalty variables should be modelled in the presence of contingency factors such as the number of stores that offer a customer card within a certain retailing setting, the store's product assortment and consumers' personal characteristics such as economic shopping orientation. Nevertheless, this study has opened a door for more specific research on the cross-national efficacy of store-loyalty programs, on the evolution of the efficacy of store-loyalty programs over time and on the (multicultural) interpretation of and interrelationship between behavioural and affective store loyalty.

References

Ajzen, I. and Fishbein, M. (1980), *Understanding Attitudes and Predicting Social Behavior*, Prentice-Hall, Englewood Cliffs, NJ.

Anderson, E.W., Fornell, C. and Lehmann, D.R. (1994), "Customer satisfaction, market share, and profitability: findings from Sweden", *Journal of Marketing*, Vol. 58 No. 3, pp. 53-66.

Bendapudi, N. and Berry, L.L. (1997), "Customers' motivations for maintaining relationships with service providers", *Journal of Retailing*, Vol. 73 No. 1, pp. 15-37.

Bennett, R. and Rundle-Thiele, S. (2002), "A comparison of attitudinal loyalty measurement approaches", *Journal of Brand Management*, Vol. 9 No. 3, pp. 193-209.

Bitner, M.J., Gwinner, K.P. and Gremler, D.D. (1998), "Relational benefits in services industries: the customer's perspective", *Journal of the Academy of Marketing Science*, Vol. 26 No. 2, pp. 101-14.

Bloemer, J. and De Ruyter, K. (1998), "On the relationship between store image, store satisfaction and store loyalty", *European Journal of Marketing*, Vol. 32 No. 5/6, pp. 499-513.

Buttle, F. and Burton, J. (2002), "Does service failure influence customer loyalty?", *Journal of Consumer Behaviour*, Vol. 1 No. 3, pp. 217-27.

Chow, G.C. (1960), "Tests of equality between sets of coefficients in two linear regressions", *Econometrica*, Vol. 28 No. 3, pp. 591-605.

Conley, C. (1998), "Loyalty cards are missing the point", *Marketing Week*, Vol. 21 No. 16, pp. 21-2.

Craig, C.S. and Douglas, S.P. (2000), *International Marketing Research*, 2nd ed., John Wiley & Sons, Chicester.

De Wulf, K. and Odekerken-Schröder, G. (2003), "Assessing the impact of a retailer's relationship efforts on consumers: attitudes and behaviour", *Journal of Retailing and Consumer Services*, Vol. 10 No. 2, pp. 95-108.

De Wulf, K., Odekerken-Schröder, G., De Canniere, M.H. and Van Oppen, C. (2003), "What drives consumer participation to loyalty programs? A conjoint analytical approach", *Journal of Relationship Marketing*, Vol. 2 No. 1/2, pp. 69-83.

Dick, A.S. and Basu, K. (1994), "Customer loyalty: toward an integrated conceptual framework", *Journal of the Academy of Marketing Science*, Vol. 22 No. 2, pp. 99-113.

Donthu, N. and Yoo, B. (1998), "Retail productivity assessment using data envelopment analysis", *Journal of Retailing*, Vol. 74 No. 1, pp. 88-104.

Dowling, G.R. and Uncles, M. (1997), "Do customer loyalty programs really work?", *Sloan Management Review*, Vol. 38 No. 4, pp. 71-82.

Flavián, C., Martínez, E. and Polo, Y. (2001), "Loyalty to grocery stores in the Spanish market of the 1990s", *Journal of Retailing and Consumer Services*, Vol. 8 No. 2, pp. 85-93.

Ganesan, V. (2001), "Multinationals scrambling to enter Asian retailing market", *Business Times Malaysia*.

Gielens, K. and Dekimpe, M.G. (2001), "Do international entry decisions of retail chains matter in the long run", *International Journal of Research in Marketing*, Vol. 18 No. 3, pp. 235-59.

Graeff, T.R. and Harmon, S. (2002), "Collecting and using personal data: consumers' awareness and concerns", *Journal of Consumer Marketing*, Vol. 19 No. 4, pp. 302-18.

Grunert, K.G. and Hildebrandt, L. (2004), "Success factors, competitive advantage and competence development", *Journal of Business Research*, Vol. 57 No. 5, pp. 549-61.

Hampton, G., van Gent, M. and Aart, P. (1984), "International marketing: 50 suggested research projects for the 1980s", *European Research*, Vol. 12, pp. 134-42.

Hewitt, M. (1998), "Loyalty's limits", *Marketing*, pp. 1-5.

Hofstede, G. (1984), *Culture's Consequences: International Differences in Work-Related Values*, Sage Publications, Thousand Oaks, CA.

Hofstede, G.H. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*, 2nd ed., Sage, Thousand Oaks, CA.

Jacoby, J. and Chestnut, R. (1978), *Brand Loyalty: Measurement and Management*, John Wiley & Sons, New York, NY.

Jones, M.A., Mothersbaugh, D.L. and Beatty, S.E. (2000), "Switching barriers and repurchase intentions in services", *Journal of Retailing*, Vol. 76 No. 2, pp. 259-74.

Jüttner, U. and Wherli, H.P. (1994), "Relationship marketing from a value system perspective", *International Journal of Service Industry Management*, Vol. 5 No. 5, pp. 54-73.

Kivetz, R. and Simonson, I. (2003), "The idiosyncratic fit heuristic: effort advantage as a determinant of consumer response to loyalty programs", *Journal of Marketing Research*, Vol. 40 No. 4, pp. 454-67.

Knox, S. (1998), "Loyalty-based segmentation and the customer development process", *European Management Journal*, Vol. 16 No. 6, pp. 729-37.

Lamey, J. (1997), "Retailing in East Asia", *European Retail Digest*, Vol. 16, pp. 49-50.

Laroche, M., Pons, F., Zgolli, N., Cervellon, M. and Kim, C. (2003), "A model of consumer response to two retail sales promotion techniques", *Journal of Business Research*, Vol. 56 No. 7, pp. 513-22.

Lee, M. and Cunningham, L.F. (2001), "A cost/benefit approach to understanding service loyalty", *Journal of Services Marketing*, Vol. 15 No. 2, pp. 113-30.

Liebermann, Y. (1999), "Membership clubs as a tool for enhancing buyers' patronage", *Journal of Business Research*, Vol. 45 No. 3, pp. 291-7.

McGoldrick, P.J. and Andre, E. (1997), "Consumer misbehavior: promiscuity or loyalty in grocery shopping?", *Journal of Retailing and Consumer Services*, Vol. 4 No. 2, pp. 73-81.

Maheswaran, D. and Shavitt, S. (2000), "Issues and new directions in global consumer psychology", *Journal of Consumer Psychology*, Vol. 9 No. 2, pp. 59-67.

Matthyssens, P. and Wursten, H. (2003), "Internal marketing", in Rugimbana, R. and Nwankwo, S. (Eds), *Cross-cultural Marketing*, Thomson Learning, London, pp. 243-56.

Mauri, C. (2003), "Card loyalty: a new emerging issue in grocery retailing", *Journal of Retailing and Consumer Services*, Vol. 10 No. 1, pp. 13-25.

Nguyen, N. and Leblanc, G. (2001), "Corporate image and corporate reputation in customers': retention decision in services", *Journal of Retailing and Consumer Services*, Vol. 8 No. 4, pp. 227-36.

Oliver, R.L. (1999), "Whence customer loyalty?", *Journal of Marketing*, Vol. 63 No. 4, pp. 33-44.

Passingham, J. (1998), "Grocery retailing and the loyalty card", *Journal of the Market Research Society*, Vol. 40 No. 1, pp. 55-63.

Patterson, P.G. and Smith, T. (2003), "A cross-cultural study of switching barriers and propensity to stay with service providers", *Journal of Retailing*, Vol. 79 No. 2, pp. 107-20.

Reichheld, F.F. (1996), *The Loyalty Effect*, Harvard Business School Press, Boston, MA.

Reinartz, W. and Kumar, V. (2002), "The mismanagement of customer loyalty", *Harvard Business Review*, Vol. 80 No. 7, pp. 86-94.

Roehm, M.L., Pullins, E.B. and Roehm, H.A. Jr (2002), "Designing loyalty-building programs for packaged goods brands", *Journal of Marketing Research*, Vol. 39 No. 2, pp. 202-13.

Sharp, B. and Sharp, A. (1997), "Loyalty programs and their impact on repeat-purchase loyalty patterns", *International Journal of Research in Marketing*, Vol. 14 No. 5, pp. 473-86.

Smith, R.E. and Swinjard, W.R. (1983), "Attitude behavior consistency: the impact of product trial versus advertising", *Journal of Marketing Research*, Vol. 20 No. 3, pp. 257-67.

Sopanen, S. (1996), *Customer Loyalty Schemes in Retailing across Europe*, Oxford Institute of Retail Management, Oxford.

Straughan, R.D. and Albers-Miller, N.D. (2001), "An international investigation of cultural and demographic effects on domestic retail loyalty", *International Marketing Review*, Vol. 18 No. 5, pp. 521-40.

Uncles, M.D., Dowling, G.R. and Hammond, K. (2003), "Customer loyalty and customer loyalty programs", *Journal of Consumer Marketing*, Vol. 20 No. 4, pp. 294-316.

Wilkie, W. (1990), *Consumer Behavior*, 2nd ed., John Wiley & Sons, New York, NY.

Further reading

Sirohi, N., McLaughlin, E.W. and Wittink, D.R. (1998), "A model of consumer perceptions and store loyalty intentions for a supermarket retailer", *Journal of Retailing*, Vol. 74 No. 2, pp. 223-45.

Yoo, B.C. and Donthu, N. (2001), "Developing and validating a multidimensional, consumer-based brand equity scale", *Journal of Business Research*, Vol. 52 No. 1, pp. 1-14.