

# The Influence of Food Values on Post-Purchase Variables at Food Establishments

Journal:	British Food Journal
Manuscript ID	BFJ-06-2019-0420
Manuscript Type:	Research Paper
Keywords:	food values, Consumer Behaviour, satisfaction, loyalty, switching costs

SCHOLARONE™ Manuscripts

# The Influence of Food Values on Post-Purchase Variables at Food Establishments

### Structured abstract

## **Purpose (mandatory)**

The importance of food values for the post-purchase process has not been widely studied. Most previous research in this line has focused on examining either the attributes of specific food categories, without taking the corresponding values into account, or food-purchasing attitudes and behaviour. To address this gap in the research, this paper delves deeper into the influence of food values on post-purchase variables.

# Design/methodology/approach (mandatory)

Specifically, it analyses the influence of food values on satisfaction with the purchases made at an establishment, loyalty (behavioural and attitudinal), and switching costs. To this end, a sample of 708 consumers, collected through online questionnaires in Spain, is analysed using various descriptive statistics and causal models.

# Findings (mandatory)

The findings confirm the influence of food values on satisfaction and that satisfaction positively influences loyalty. Switching costs were not found to moderate the relationship between satisfaction and loyalty.

# Research limitations/implications (if applicable)

The survey had to be completed online, and, thus, respondents needed to have an e-mail address. This influenced the respondents' profile, since many consumers over the age of 54 do not have e-mail, do not use it, or are more reluctant to complete online surveys.

# **Practical implications (if applicable)**

Purchase satisfaction was not found to affect switching costs, which reinforces the idea that loyalty can sometimes be spurious. It would thus be an indicator that, as long as consumers have no other option, they will continue to shop at the establishment. In contrast, establishment satisfaction did generate switching costs. This finding could be due to aspects such as convenience, the development and maintenance of relationships with the employees, knowledge of where products are located in the store, etc.

Customers may be dissatisfied with their purchase, yet still satisfied with an establishment, which could entail very high switching costs for them and, therefore, cause them to remain loyal (albeit spuriously) to the establishment.

# **Social implications (if applicable)**

## **Originality/value (mandatory)**

This research contributes to the literature in this field by examining the influence of food values on key postpurchase variables.

**KEYWORDS:** Food values, consumer behaviour, satisfaction, loyalty, switching costs.

# The Influence of Food Values on Post-Purchase Variables at Food Establishments

#### INTRODUCTION

There is considerable interest in understanding consumer behaviour based on the motivations, preferences, and habits that trigger the purchase of food products (O'Neill et al., 2014). Food choice is a complex issue, amongst other things, because people can make around 200 decisions a day related to food and beverage consumption (Wansink and Sobal, 2007). Thus, the purchase of food for consumption is no longer considered a purely routine process and has come to be regarded as a process with a high degree of consumer engagement, especially in certain situations and for certain products. The food-product purchasing process can be described as a complex process influenced by individual (personality), environmental (Furst et al., 1996), and sociodemographic aspects, as well as individual motivations and values (Chen, 2007; Wadolowska et al., 2008), amongst other things. Aspects related to context and social interaction might also be cited, as well as certain sensory attributes of foods and the information stated on the product (King et al., 2004).

The whole process is influenced by the changes in consumer buying and consumption habits of recent years. Over the last few decades, a debate has arisen over how aspects such as health or ethics influence eating in terms of food production and distribution (Clarke *et al.*, 2008). Despite increased social awareness of the importance of a healthy, balanced diet, more and more people suffer from obesity, are less physically fit, and have a more sedentary lifestyle. Likewise, consumer groups have emerged that are more concerned with the genetic modification processes that have become increasingly common in commercialised food (Luomala *et al.*, 2006). For all of these reasons, determining how consumers assess the characteristics of the food products on offer at different food establishments is of great interest.

With a view to addressing these consumer concerns, in the field of retail, retailers are devoting more and more space to dietary and health products, amongst other things. There is also increased interest in identifying which aspects of the purchased food and of the retailers that sell it shoppers value most, as well as which ones have the greatest influence on key variables such as satisfaction, loyalty, or switching costs (Martínez-Ruiz *et al.*, 2010).

In this broad and heterogeneous frame of reference, it is helpful to take a more detailed look at the relatively new concept of food values and, especially, at how consumers take them into account in their food-purchasing and consumption processes (c.f., Lusk and Briggeman, 2009; Lusk, 2011; Martínez-Ruiz and Gómez-Cantó, 2016). The present paper aims to examine the importance of food values in the food-purchasing and consumption process, as well as their impact on satisfaction, loyalty, and switching costs with regard to the retail establishment where the food is bought. To achieve this goal, the remainder of this paper will be structured as follows. First, it will offer a review of the relevant literature on this line of research to enable the formulation of research hypotheses. Next, it will analyse the results of the empirical part of the research, which was conducted using a database built with an online questionnaire completed by consumers in Spain. Finally, it will discuss the conclusions and implications for management, as well as the limitations and future lines of research.

#### CONCEPTUAL FRAMEWORK

#### Food values

Several studies have shown that personal values can predict the consumption of products such as food (e.g. Grunert and Juhl, 1995; Povey *et al.*, 2000), influencing consumers' choices (e.g. Allen and Baines, 2002; Feather *et al.*, 1998). Building on that work, others studies, including key subsequent contributions such as Lusk and Briggeman (2009) or Lusk (2011), have sought to identify why consumers prefer some food products over others, taking into account the most important food values for the end consumer.

Specifically, Lusk and Briggeman (2009) conduct an extensive review of the relevant literature on end consumers' willingness to pay for food products and for the values they represent, applying to food the general concept of values previously defined by authors such as Rokeach (1973) or Schwartz (1992). They argue that consumers have intermediate values consisting of a stable set of beliefs about the relative importance of certain meta-attributes resulting from end states (desired goals and states), associated with the purchase and consumption of food. The existence of these values could play a key role in explaining consumers' choices according to the aforementioned means-end chain theory, which postulates that fundamental underlying values motivate consumers' purchase decisions.

The literature review shows that many studies have sought to identify consumers' preferences for product-specific attributes, without considering the fact that, when making their purchase decision, consumers are choosing from a wide range of products with a large variety of characteristic attributes or features (Lister *et al.*, 2014). This is why Lusk and Briggeman (2009) and Lusk (2011) study the general classifications attributable to food in the form of values, since they express more abstract attributes, capable of explaining consumers' purchases over time. Some of these food values, such as safety, origin, or naturalness, have frequently been considered in many subsequent studies conducted in the field of consumer preferences (e.g. Adalja *et al.*, 2015).

### The influence of food values on key post-purchase variables

Satisfaction is one of the main key variables in the construction of company-consumer relationships (Oliver, 1997). In general, consumer satisfaction can be defined as a global evaluation or a state of feelings toward a product, service, or establishment (Olsen *et al.*, 2005). For Giese and Cote (2000), consumer satisfaction is a response (cognitive or affective) of varying intensity, with a time-specific point of determination and limited duration, directed toward focal aspects of product acquisition and/or consumption. In light of this definition, a customer's satisfaction with his or her purchase can be the result of the value provided by that experience and thus could include both hedonic and utilitarian benefits, bearing in mind that every consumer behaves differently and assigns different value to his or her purchase experience.

In this regard, Vad Andersen and Hyldig (2015) observe that the sensory properties of food (e.g. appearance, taste, texture) are one determinant of satisfaction. Accordingly, they have been used in numerous studies on food and consumer behaviour (Tuorila, 2007). Another widely researched aspect is the origin or provenance of food and its influence on satisfaction. For example, Stefani *et al.* (2006) highlight the importance of knowing the origin of food and its influence on hedonic benefits in the eating experience. Origin is thought to affect the consumer's assessment in two ways: either because it can be considered an indication of quality insofar as it suggests certain

connotations (e.g. sensory characteristics, symbolic function) or due to ethical values, authenticity, or its ability to evoke memories of past experiences (satisfactory or otherwise). Additionally, Vad Andersen and Hyldig (2015) conclude that multiple factors are likely to contribute to food satisfaction (the hedonic and/or sensory ones being the most highly valued) and that the importance of each factor is different for each person. Vad Andersen *et al.* (2017) corroborate that the hedonic sensory experience is the most important factor for food satisfaction and that post-consumption sensations can also contribute to it.

Finally, some studies have focused on assessing consumer satisfaction with food purchases based on the retail format (Carpenter and Moore, 2006; Kamran-Disfani *et al.*, 2017).

Food retailers should thus understand these differences in order to create retail formats and offer products with values that allow them to differentiate themselves from their competitors. This is especially true given that, as a result of the highly heterogeneous nature of consumers' expectations, satisfaction can vary depending on both the values offered by the food purchases and the type of establishment (Huddleston *et al.*, 2009). Based on these ideas, the following research hypotheses can be proposed regarding the expected influence of food values on both purchase satisfaction and satisfaction with the establishment:

H1. Food values have a positive influence on satisfaction.

As this satisfaction can refer both to the purchase and to the retail establishment where it is made, this hypothesis can be further divided into the following two sub-hypotheses:

H1a. Food values have a positive and significant influence on purchase satisfaction.

H1b. Food values have a positive and significant influence on establishment satisfaction.

Loyalty is also undoubtedly a key variable in consumers' post-purchase processes. In general, customer loyalty is understood as the buyer's overall attachment, or deep commitment, to a product, service, brand, or organisation (Oliver, 1999). The concept of loyalty has a similar meaning to that of relational commitment, which is usually described in the relationship marketing literature as an enduring desire to stay in a valuable relationship (Anderson and Weitz, 1992; Morgan and Hunt, 1994).

The relevant literature shows that whilst the study of loyalty has been approached from many perspectives, the most common are the behavioural and attitudinal perspectives (Dick and Basu, 1994). The former conceptualises loyalty as repeat purchasing behaviour. According to this perspective, people may repeat purchases out of habit due to the existence of barriers to switching providers or a lack of attractive alternatives. Thus, customers may stay in the relationship out of obligation, developing a sort of spurious loyalty, i.e. without ever developing feelings toward the provider or supplier (Picón *et al.*, 2014). The latter perspective, the attitudinal approach, describes loyalty as a psychological state (affective and/or cognitive), which the customer can achieve as a result of the company's relational strategy. Under this approach, the customer may maintain the relationship based on the benefits received whilst it lasts. This approach is based on the idea that true loyalty is a positive attitude toward the company. Therefore, a positive attitude toward the provider or supplier is what ensures repeat purchases in

the future. From this perspective, unlike in the previous type of relationship, customers are loyal because they truly wish to maintain the relationship (Oliver, 1999). The present paper refers to these two perspectives.

Although customer satisfaction has long been commonly considered a clear antecedent of loyalty, some authors (e.g. Mital and Lassar, 1998) have shown that a satisfied customer is not always a loyal one. These authors base their argument on two possible reasons: (1) a dissatisfied customer may continue to buy the same brand or go to the same store if she cannot find anything better amongst the available alternatives; and (2) a satisfied customer may be willing to purchase new brands or go to a new provider in the hopes of achieving more favourable results. In light of these ideas, the following hypothesis regarding the positive influence that satisfaction is expected to have on loyalty can be formulated:

H2. Satisfaction has a positive and significant influence on loyalty.

However, since satisfaction can refer to both the purchase and the retail establishment where the purchase is made, the foregoing hypothesis can be divided into the following two sub-hypotheses:

H2a. Purchase satisfaction has a positive and significant influence on loyalty.

H2b Establishment satisfaction has a positive and significant influence on loyalty.

Finally, the present research also seeks to measure the influence that satisfaction, with both the purchase and the establishment, is likely to have on switching-cost variables. In the field of marketing, switching barriers generally refer to the difficulties that dissatisfied customers must overcome to switch to another provider or supplier; they may also include the financial, social and psychological burden borne by the customer when he or she switches to another establishment (Fornell, 1992). Therefore, the higher the switching barrier, the more a customer will feel he or she has no choice but to remain loyal to a retail establishment. Switching costs can be defined as the cost incurred when switching from one retail establishment to another, including time, money, and psychological costs (Dick and Basu, 1994). This definition could also include the perceived risk, insofar as there are also potential losses when switching establishments, including financial, social, psychological, and safety-related losses (Murray, 1991).

With regard to the role of switching costs in the satisfaction-loyalty relationship, some studies consider switching costs to be an antecedent of loyalty (e.g. Aydin *et al.*, 2005). In fact, Kotler (1997) indicates that switching costs play a key role in the process of building customer loyalty, noting that there are two main ways to retain customers: increasing the satisfaction level and increasing the switching costs. Likewise, some authors (e.g. Dagger and David, 2012) suggest that switching costs have a moderating effect on the satisfaction-loyalty relationship, arguing that the impact of satisfaction on loyalty is much greater when switching costs are lower (Bell *et al.*, 2005). This argument assumes that customer's decision to remain loyal to a supplier depends on how he or she evaluates the switching costs. Switching to another retail establishment or brand would entail both a cognitive and a behavioural effort.

Satisfied customers are generally understood to have less motivation to seek and evaluate other alternatives (Liu, 2006). This is consistent with the work of authors such as Pick and Eisend (2014), who argue that the perceived quality of a relationship and a company's offer are positively related to switching costs. Additionally, Oliver (1999) suggests that satisfaction is a necessary step in the loyalty-building process, but that it

becomes less significant when other mechanisms (e.g. social or personal ties) are influencing that loyalty. All these factors create switching costs that increase customer retention. Matzler *et al.* (2015) find also a positive relationship between satisfaction and switching costs, establishing that switching costs have a mediating effect on the satisfaction-loyalty relationship. Furthermore, customer satisfaction enables greater identification with the brand and the supplier, which increases the switching costs (Matzler *et al.*, 2015).

This mediating effect is also analysed by De Matos *et al.* (2009), who conclude that different types of relationships (direct, partially mediated, totally mediated, and moderated) can be established between satisfaction, switching costs, and loyalty and that switching costs can thus act differently depending on the context within the satisfaction-loyalty relationship (i.e. depending on whether they have, for example, a mediating effect on the satisfaction-loyalty relationship). Additionally, Picón *et al.* (2014) corroborate that switching costs play a mediating role within this relationship and thus argue that satisfaction influences the expected perception of the costs and benefits of switching and that this perception, in turn, influences loyalty. This reasoning is grounded in the idea of opportunity costs: the higher the satisfaction, the greater the opportunity costs, or loss of satisfaction, when the customer switches (Picón *et al.*, 2014).

Based on these ideas, the following research hypotheses can be proposed regarding the potential influence that purchase satisfaction and satisfaction with an establishment are likely to have on switching costs:

- H3. Purchase satisfaction has a positive and significant influence on switching costs.
- H4. Establishment satisfaction has a positive and significant influence on switching costs
- H5. Switching costs have a positive and significant influence on loyalty.

Figure 1 graphically synthesises the proposed relationships between the considered variables.

Figure 1

#### **METHODOLOGY**

To test the model proposed in Figure 1, a questionnaire was designed containing questions aimed at obtaining information about the retail establishment where the respondents had made their purchase, their socio-demographic profile, and the study variables (food values, satisfaction, loyalty, switching costs). The scales used for the food-value variables were adapted from Lusk and Briggeman (2009) and Lusk (2011). Specifically, the questions related to these variables focused on how important respondents considered these values to be on a scale of 1 to 5, where 1 was the least important and 5 the most. In contrast, to assess satisfaction, switching costs, and loyalty, 5-point Likert scales were used. These items were adapted from Kamran-Disfani *et al.* (2017).

Over the month of April 2017, 708 online questionnaires were collected in the city of Albacete. The questionnaires were distributed amongst shoppers over the age of 18 who lived in the city and had previously made their purchase at a consumer-goods establishment in the city.

# Descriptive analysis

A total of 708 valid questionnaires were collected, with regard to which 63.4% of the respondents were women and 36.6% men. A total of 69.5% of the respondents had a monthly income of up to 1,200 euros, followed by 19.8% with a monthly income of up to 1,800 euros. Some 76.7% of the respondents were single or had a partner but no children, whilst 23.3% had children. A total of 52.1% were aged 23 or under, and 29.1% aged 33 or under. With regard to educational attainment, 44.2% had completed basic education, followed by 36.4% with university studies.

As for the retail establishment where the respondents had made their purchase, 68.78% had shopped at a supermarket, whilst 16.80% had shopped at a discount store (i.e. 85.59% of the sample was concentrated in these two types of retail formats).

The items used to test the model had scores above the mean. With regard to the different groups of variables, the scores for the food-value scale were above the mean and even, for many items, above 3.5. Specifically, the food-value scales with the highest mean scores were, in order, 'taste' and 'extent to which food does not cause illnesses'. In contrast, the scales with the lowest mean scores were for the values referring to the 'extent to which all parties involved in the trade equally benefit' and to 'where the agricultural commodities used to make the food were grown'. With regard to the purchase satisfaction variables, the highest mean score was found for the variable 'purchases made at this establishment meet my expectations', whilst the lowest mean score was found for the variable 'I consider the choice of this establishment to make my purchase a good one'. As for establishment satisfaction, the highest mean score was found for the variable 'satisfaction level with the retail establishment' and the lowest for 'compared to other establishments, my satisfaction level is'. As concerns lovalty, the highest mean score was found for the variable, 'I plan to continue shopping at this establishment', and the lowest for 'Whenever possible, I recommend this establishment'. Finally, regarding switching costs, the highest average score was found for the variable 'knowledge of product location' and the lowest for 'special relationship with the employees'. See Table 1.

# Table 1

PLS SEM was used to validate the model proposed in Figure 1. The model was estimated using SmartPLS 3.0 software. To establish the significance of the parameters, bootstrapping was performed with 10000 resamples.

To ensure construct reliability and validity, first, the indicator loadings were examined for the reflective constructs. Those items with a loading of less than 0.7 were omitted (Hair *et al.*, 2018). Specifically, the item 'special relationship' was omitted from the switching costs construct, as it had a score of less than 0.55. The 'food values' variable was considered a formative construct. The assessment of this type of construct is based on: (1) convergent validity; (2) collinearity; and (3) the weight of each indicator (Hair *et al.*, 2017). For the measurement of the formative constructs, convergent validity was assessed through the construct's correlation with an alternative measure of the same concept (Hair *et al.*, 2017). With regard to the weights of each indicator, some items had a low score. Unlike reflective indicators, formative indicators are not interchangeable; therefore, omitting a single indicator can reduce the validity of the measurement model's content (Diamantopoulos and Winklhofer, 2001).

The next step was to evaluate construct reliability and validity. The most commonly used criterion is that proposed by Jöreskog (1971), which establishes that values over the 0.7 to 0.9 range are considered good or very good. Other indicators are Cronbach's alpha, composite reliability, and average variance extracted (AVE). To determine discriminant validity, the sole criterion offered by PLS was used, which verifies whether the AVE of each factor is greater than the square of the correlation between each pair of factors (Fornell and Larcker, 1981).

Before the structural model can be validated, it is necessary to test for collinearity. This process must be performed for both formative and reflective constructs. As all the indicators have values lower than 3, it can be concluded that there is no collinearity (Hair *et al.*, 2018; Becker *et al.*, 2013). To evaluate the structural model's predictive power, the criterion proposed by Falk and Miller (1992) was used, namely, the R<sup>2</sup> of each dependent construct must be greater than 0.1.

In particular, the  $R^2$  for each construct is: .490 for Loyalty ( $Q^2$ =.295), .203 for Purchase Satisfaction ( $Q^2$ =.134), .141 for Establishment Satisfaction ( $Q^2$ =.064)and .044 for Switching Costs ( $Q^2$ =.0024).

The 'switching costs' construct has a value of less than .10. However, this result should be interpreted with caution, since its value depends on the number of the construct's predictors (Hair *et al.*, 2018).

#### **Estimation results**

Finally, once all the measurement instrument's psychometric properties had been evaluated, the model proposed in Figure 1 was estimated. The model estimation results are shown in Table 2.

Once the hypotheses had been directly tested in the model, the mediating effect of some of the study variables was analysed. Mediation refers to the presence of an intermediate variable or mechanism that transfers the effect of an antecedent variable on an outcome (Aguinis *et al.*, 2016). This gives rise to the formulation of a mediation hypothesis postulating how, or by what means, an independent variable affects a dependent variable through one or more mediating variables (Cepeda *et al.*, 2018).

### Table 2

Most PLS-SEM studies do not consider mediating effects in their hypotheses and, therefore, do not analyse their importance in structural models (Hair *et al.*, 2016). However, there is a substantial body of literature on methods for testing mediating effects (Hayes and Scharkow, 2013). For example, in the present research, there is a type of mediation, namely, simple mediation, that occurs when there is only one mediating variable, i.e. mediation exists when the relationship between the independent and dependent variable changes as a result of the introduction of a mediating variable. This causal effect of an independent variable on the dependent one can be divided into two types of effects (Cepeda *et al.*, 2018):

- Indirect effect (AxB) through a mediator variable (M).
- Direct effect (path C')
- Total effect (direct effect + indirect effect) = C = C' + (AxB)

In the present research, to calculate the mediating effects, bootstrapping was performed. To test the indirect effects in PLS, several steps were followed (adapted from Chin, 2010). Specifically, the steps developed in Zhao *et al.* (2010) and Nitzl *et al.* (2016)

were followed. First, the importance of the effect was determined by evaluating the significance of the indirect effects (AxB). To test that significance, bootstrapping was performed with 10,000 resamples. The direct effect values obtained were then multiplied.

Second, the type and magnitude of the indirect effect were determined. To this end, the variance accounted for (VAF) was calculated, which is the ratio of the indirect effect to the total effect (direct effect + indirect effect) (Hair *et al.*, 2016). In other words, VAF determines the extent to which the mediation process explains the variance in the dependent variable (Cepeda *et al.*, 2018). Specifically, it does so as follows:

```
VAF = (Indirect effect) / (Total effect)
VAF = (Indirect effect) / (Direct effect + Indirect effect)
VAF > 80\% \rightarrow Full mediation
20\% \le VAF \le 80\% \rightarrow Partial mediation
VAF \le \rightarrow 20\% \rightarrow No mediation
```

In the present case, switching costs were not found to have any mediating effect on the purchase satisfaction-loyalty relationship, as can be seen in the following formula:

```
(0.065*0.345) / ((0.151+(0.065*0.345)) = 12.93\% > No mediating effect
```

Nor were switching costs found to have any mediating effect on the establishment satisfaction-loyalty relationship:

```
(0.155*0.345) / ((0.418+(0.155*0.345)) = 11.34\% > No mediating effect
```

Thus, the results obtained corroborate the model proposed in Figure 1. Support was found for all the hypotheses except H3 (referring to the purchase satisfaction-switching costs relationship).

Specifically, the data show that the strongest influence is that exerted by food values on purchase satisfaction, followed, in descending order, by the influence of: establishment satisfaction on loyalty; food values on establishment satisfaction; switching costs on loyalty; establishment satisfaction on switching costs; and establishment satisfaction on loyalty. Finally, switching costs were not found to have any mediating effect on the relationship between satisfaction and loyalty.

These results are consistent with the literature in this line of research, as they highlight the importance of offering a product or providing a service that satisfies the customer. This helps generate loyalty, with regard to both products and the services offered at the retail establishment. However, although these conditions are necessary, they are not enough to create true loyalty. Support was not found for the relationship proposed in hypothesis H3 (purchase satisfaction-switching costs), which could lead customers to buy the same product in another establishment. Retailers should pay careful attention to this aspect, making sure to offer products that build customer loyalty through superior quality or exclusive distribution.

# DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

The present research has furthered understanding of the importance of food values in the post-purchase process, allowing a more in-depth exploration of consumer behaviour in the field of food and consumer goods retail. From a conceptual perspective, having considered Lusk (2011) and Lusk and Briggeman (2009) is a major advance, as those papers marked a turning point in the line of research of this paper. Amongst other things, the work of those authors opened the doors to the study of food values, as opposed to attributes, thereby enabling a more detailed analysis from a consumer perspective. It must be recalled that food values are the union of a consumer's values as a human being with what that consumer believes that any food he or she purchases or consumes should have.

The results also show that food values greatly influence customer satisfaction, with regard to both the purchase and the retail establishment. That is a necessary first step for consumers to consider an establishment as a potential purchasing option. Interestingly, in this research, consumers placed greater importance on purchase satisfaction than establishment satisfaction. This underscores the strategy that retailers are pursuing to build customer loyalty, first, by meeting customers' needs and, second, by trying to ensure that their shelves and sales outlets are stocked with foods that take food values into account (functional foods, superfoods, dietary foods, preservative-free foods, low-calorie foods, etc.). In other words, more and more consumers are increasingly aware of the various values that food can represent and are trying to address aspects related to values such as health and wellness.

The results of the assessment of the post-purchase process are also worth highlighting. When evaluating the satisfaction-loyalty relationship, consumers placed more importance on the establishment where they made the purchase than on the products they bought there. This finding is consistent with previous research that has shown that a satisfied customer is not always a loyal one.

In contrast, switching costs were not found to have a mediating effect on the satisfaction-loyalty relationship, that is, only direct effects were detected. Likewise, purchase satisfaction was not found to affect switching costs, which reinforces the idea that loyalty can sometimes be spurious. It would thus be an indicator that, as long as consumers have no other option, they will continue to shop at the establishment. In contrast, establishment satisfaction did generate switching costs. This finding could be due to aspects such as convenience, the development and maintenance of relationships with the employees, knowledge of where products are located in the store, etc.

Finally, attention should be called to the importance of the relationship between switching costs and loyalty (attitudinal and behavioural), i.e. customers may be dissatisfied with their purchase, yet still satisfied with an establishment, which could entail very high switching costs for them and, therefore, cause them to remain loyal (albeit spuriously) to the establishment. Even the descriptive analysis showed that this was the variable to receive the lowest score, which could suggest that the consumer was shopping at the establishment for convenience. It should be recalled that around 60% of the respondents were shopping at a supermarket and that the structure of this retail format is quite close to their homes, meaning the consumers might shop at multiple establishments.

These results could be due to the sample profile, since a high percentage of the respondents were consumers under the age of 35. The failure to obtain a sample with a broader age range could be due, amongst other things, to the fact that the survey had to be completed online, and, thus, respondents needed to have an e-mail address. Many consumers over the age of 54 do not have e-mail, do not use it, or are more reluctant to complete online surveys.

#### REFERENCES

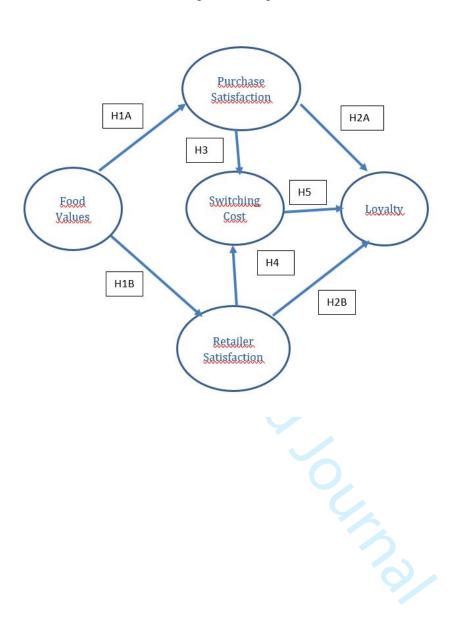
- Adalja, A., Hanson, J., Towe, C. and Tselepidakis, E. (2015), "An examination of consumer willingness to pay for local products", *Agricultural and Resources Economic Review*, Vol. 44, No 3, pp. 253-274
- Aguinis, H., Edwards, J. R., Aguinis and Bradley, K. J. (2016), "Improving our understanding of moderation and mediation in strategic management research", *Organizational Research Methods*, Advance online publication. DOI: 1094428115627498.
- Anderson, E.W. and Weitz, M. (1990), "The antecedents and consequence of Customer satisfaction for firms", *Marketing Science*, Vol. 12, No 2, pp. 125-143.
- Anderson, E.W.; Fornel, 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
- Aydin, S. Özer, G. and Arail, Ö. (2005), "How switching costs affect subscriber loyalty in the Turkish mobile phone market: an exploratory study", *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 14, No 2, pp. 14-155
- Becker J-M, Rai A. and Ringle CM. (2013), "Discovering unobserved heterogeneity in Structural Equation Models to avert validity threats", *MIS Quarterly* Vol. 37, No 3, pp. 665-694.
- Bell, S.J; Auh, S. and Smalley, k. (2005), "Customer relationship dynamics: service quality and customer loyalty in the context of varying levels of customer expertise and switching cost" *Journal of the academy of Marketing*, Vol. 33 No 2, pp. 169-183.
- Carpenter, J.M. y Moore, M. (2006), "Consumer demographics store attributes and retail format choice in the US grocery market", *International Journal of Retail & Distribution Management*, Vol. 34, No 6, pp. 434-52
- Cepeda, G, Nitzl, C. and Roldán, J. L. (2018), "Mediation analyses in Partial Least Squares Structural Equation Modeling, guidelines and empirical examples" In *Marketing at the Confluence between Entertainment and Analytics* (forthcoming). Springer, Cham.
- Chen, M.F. (2007), "Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits", *Food Quality and Preference*, Vol. 18, pp. 1008-1021.
- Chin, W. W. (2010), "How to write up and report PLS analyses" In Esposito Vinzi, V.; Chin, W. W.,
- Clarke, N.; Cloke, P.; Barnett, C. and Malpass, A. (2008), "The spaces and ethics of organic food", *Journal of Rural Studies*, Vol. 24, pp. 219-230.
- Dagger, T and David, M.E. (2012), "Uncovering the real effect of switching cost on the satisfaction-loyalty association. The critical role of involvement and relationship benefits", *European Journal of Marketing*, Vol. 16, No <sup>3</sup>/<sub>4</sub>, pp. 447-468
- De Matos, C.A.; Henrique, J.L. and de Rosa, F. (2009), "The different roles of switching costs on the satisfaction-loyalty relationship", *International Journal of bank marketing*, Vol. 27 No 7, pp. 506-523.
- Diamantopoulos A and Winklhofer HM. (2001), "Index Construction with Formative Indicators: An alternative to Scale Development", *Journal of Marketing Research*, Vol. 38, No. 2, pp. 269-277.
- Dick, A. S., and Basu, K. (1994), "Customer loyalty: Toward an integrated conceptual framework", *Journal of the Academy of Marketing Science*, 22, 99–113.
- Falk, R.F. and Miller, N.B. (1992) *A Primer for Soft Modeling*. University of Akron Press, Akron.
- Fornell CG and Larcker DF. (1981), "Evaluating Structural Equation Models with unobservable Variables and measurement Error", *Journal of Marketing Research*, Vol. 18, No 1, pp. 39-50
- Fornell, C. (1992), "A national customer satisfaction barometer: The Swedish experience", *Journal of Marketing*, Vol. 56, pp. 6–21.
- Furst, T.; Connors, M.; Sobal, J.; Bisogni, CA. and Falk, LW. (1996), "Food choice: a conceptual model of the process", *Appetite*, Vol. 26, pp. 247-265.
- Giese, J.L. and Cote, J.A. (2000), "Defining consumer satisfaction", *Academy of Marketing Science Review*, Vol. 1, pp. 1-24.
- Hair JF, Hult GTM, Ringle CM, et al. (2017), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Thousand Oaks, CA: Sage

- Hair Jr, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2016), *A primer on partial least squares structural equation modeling (PLS-SEM)*, 2<sup>nd</sup> edition. Thousand Oaks, CA: Sage.
- Hair, J.F.; Risher, J.J.; Sarstedt, M. and Ringle, Ch.M. (2018), "When to use and how to report the results of PLS-SEM", *European Business Review*, <a href="https://doi.org/10.1108/EBR-11-2018-0203">https://doi.org/10.1108/EBR-11-2018-0203</a>
- Hayes, A. F., and Scharkow, M. (2013), "The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter?", *Psychological Science*, Vol. 24, No 10, pp. 1918-1927.
- Huddleston, P.; Whipple, J.; Nattick, R.N. and Lee, S.J. (2009), "Customer satisfaction in food retailing: comparing specialty and conventional grocery stores", *International Journal of Retail & Distribution Management*, Vol. 37, No 1, pp. 63-80
- Jöreskog, K.G. (1971), "Simultaneous factor analysis in several populations", *Psychometrika*, Vol. 36 No 4, pp. 409-426.
- Kamran-Disfani, O., Mantrala, M.K., Izquierdo-Yusta, A. and Martínez-Ruiz, M.P. (2017), The impact of retail store format on the satisfaction-loyalty link: An empirical investigation, *Journal of Business Research*, 77 (issue C), 14-22.
- King, S. C.; Weber, A.J.; Meiselman, H.L. and Lv, N. (2004), "The effect of meal situation, social interaction, physical environment and choice on food acceptability", *Food Quality and Preference*, Vol. 15, pp. 645-653.
- Kotler, P. (1997), *Marketing Management: Analysis, Planning, Implementation, and Control.* 9th Edition, Prentice Hall, Upper Saddle River.
- Lister, G., Tonsor, G., Brix, M., Schroeder, T. and Yang, C. (2014), "Food values applied to livestock products", Working Paper.
- Liu, A.H. (2006), "Customer value and switching costs in business services: developing exit barriers through strategic value management", *Journal of Business and Industrial Marketing*, Vol. 21 No 1, pp. 30-37.
- Luomala, H.T.; Paasovaara, R. and Lehtola, K. (2006), "Exploring consumers' health meaning categories: towards a health consumption meaning model", *Journal of Consumer Behaviour*, Vol. 5, No 3, pp. 269-279.
- Lusk, J. L. (2011), "External validity of the food values scale", *Food Quality and Preference*, Vol. 22 No 5, pp. 452- 462.
- Lusk, J. L. and Briggeman, B. (2009), "Food values", *American Journal of Agricultural Economics*, Vol 91, pp. 184-196.
- Martínez-Ruíz, M. P.; Jiménez-Zarco, A. I. and Izquierdo- Yusta, A. (2010), "Customer satisfaction's key factors in Spanish grocery stores: Evidence from hypermarkets and supermarkets", *Journal of Retailing and Consumer Services*, Vol. 17, pp. 278-285.
- Matzler, K.; Strobl, A.; Thurner, N. and Füller, J. (2015), "Switching experience, customer satisfaction, and switching costs in the ICT industry", *Journal of Service Management*, Vol 26, No 1, pp. 117-136.
- Mital, B. and Lassar, W.M. (1998). Why do customers switch? The dynamics of satisfaction versus lovalty The Journal of Services Marketing, Vol. 12, No. 3, pp. 177-194.
- Moorman, Ch.; Zaltman, G. and Deshpande, R. (1992), "Relationships between providers and users of marketing research: the dynamics of trust within and between organizations", *Journal of Marketing Research*, Vol. 29 (August), pp. 314-329.
- Morgan, R.M. and Hunt, S.D. (1994), "The commitment-trust Theory of relationship marketing", *Journal of Marketing*, Vol. 58 (July), pp. 20-38.
- Murray, K. B. (1991), "A test of services marketing theory: Consumer information acquisition activities", *Journal of Marketing*, Vol. 55, pp. 10–25.
- Nitzl, C., Nitzl, C., Roldan, J. L., Roldan, J. L., Cepeda, G. and Cepeda, G. (2016), "Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models", *Industrial Management and Data Systems*, Vol. 116 No 9, pp. 1849-1864.
- Oliver, L. (1997), *Behavioral Perspective on the Consumer*, McGraw-Hill, New York, NY Oliver, R.L. (1999), "Whence consumer loyalty", *Journal of Marketing*, Vol. 63, pp. 33-44

- Olsen, S.O., Wilcox, J. and Olsson, U. (2005), "Consequences of ambivalence on satisfaction and loyalty", *Psychology & Marketing*, Vol. 22 No. 3, pp. 247-69.
- Pick, D. and Eisend, M. (2014), "Buyer's perceived switching costs as switching: a metaanalytic assessment of their antecedents", *Journal of the Academy of Marketing Science*, Vol. 42 No 2, pp. 186-204.
- Picón, A.; Castro, I. and Roldán, J.L. (2014), "The relationship between satisfaction and loyalty: a mediator analysis", *Journal of Business Research*, Vol. 67 No 5, pp. 746-751.
- Stefani, G., Romano, D. and Cvicchi, A. (2006), "Consumer expectations, liking and willingness to pay for specialty foods: do sensory characteristics tell the whole story?", *Food Quality and Preference*, Vol. 17 No 1-2, pp. 53-62
- Tuorila, H. (2007), "Sensory perception as a base of food acceptance and consumption" In H.J.H. MacFie (ed). Consumer-led food product development, pp. 34-59, Cambridge: Woodhead Publishing Limited.
- Vad Andersen, B. and Hyldig, G. (2015), "Consumer's view on determinants to food satisfaction, A qualitative approach", *Appetite*, Vol. 95, pp. 9-16.
- Wadolowska, L.; Babicz-Zielinska, E. and Czarnocinska, J. (2008), "Food choice models and their relation with food preferences and eating frequency in the Polish population: POFPRES study," *Food Policy*, Vol. 33, pp. 122-134.
- Zhao, X., Lynch Jr, J. G. and Chen, Q. (2010), "Reconsidering Baron and Kenny: Myths and truths about mediation analysis", *Journal of Consumer Research*, Vol. 37 No 2, pp. 197-206.

# **Figures**

Figure 1. Proposed Model



# **Tables**

**Table 1. Univariate analysis** 

	ITEM	Mean	Standard deviation
FOOD VALUES	Food produced without modern technologies	3.5791	1.07074
	Taste of food	4.3771	0.81213
	Price of food	3.8602	0.96557
	Food does not cause illnesses	4.2331	1.04262
	Ease with which food is cooked or consumed	3.6031	0.96434
	Nutritional value of food	3.7246	0.98883
	Preservation of traditional consumption patterns	3.2472	1.08854
	Where the agricultural commodities used to make the food were grown	3.0438	1.16748
	Extent to which all parties involved in the trade equally benefit	2.8771	1.16059
	Extent to which the food seems appealing	3.8545	0.93495
	Effect of food production on the environment	3.2246	1.10117
PUR	Purchases made at this establishment meet my expectations	4.09	0.621

SE S	My experience with the purchases made at this establishment is satisfactory	4.03	0.647
CHASE	I consider the choice of this establishment to make my purchase a good one	3.95	0.764
ESTABLISHMENT SATISFACTION	Satisfaction level with my purchases	3.98	0.768
	Satisfaction level with the retail establishment	4.01	0.804
	Compared to other establishments, my satisfaction level is	3.96	0.7
SWITCHING	Disruption involved in switching to another establishment	2.83	1.211
	Time needed to make the purchase at another establishment	2.93	1.202
	Knowledge of product location	4	0.944
	Special relationship with employees	2.23	1.227
	I do most of my shopping at this establishment	3.77	0.999
LOYALTY	Whenever possible, I recommend this establishment	3.11	1.155
	I always think of this establishment as the best option	3.58	1.037
	I plan to continue shopping at this establishment	3.95	0.874
	I expect my relationship with the establishment to last over time	3.58	1.04

**Table 2. Path coefficients** 

	β	t-statistic	ρ value
(H1a) Food valuesPurchase satisfaction	.451	12.205	0.000
(H1b) Food valuesEstablishment satisfaction	.375	9.976	0.000
(H2a) Purchase satisfactionLoyalty	.151	3.569	0.000
(H2b) Establishment SatisfactionLoyalty	.418	10.090	0.000
(H3) Purchase satisfactionSwitching costs	.065	1.115	0.265
(H4) Establishment satisfactionSwitching costs	.155	2.756	0.000
(H5) Switching costsLoyalty	.345	11.999	0.000