GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE
CONSUMER BEHAVIOR AFFECTED?

LES RUPTURES DE STOCKS DANS LA GRANDE DISTRIBUTION
GENERALISTE : A QUEL POINT LE COMPORTEMENT DE FIDELITE DU
CONSOMMATEUR EST IL AFFECTE ?

LAILA EL HADDOU-YOUSFI
Professor, FSJES Ait Melloul, Ibn Zohr University, Morocco
laila.elhaddouyousfi@gmail.com

KAMAL LAKHRIF
Professor, FSJES Agadir, ERMMACOT Research Team, Ibn Zohr
University, Morocco
K.lakhrif@uiz.ac.ma

Date de soumission : 16/08/2020
Date d’acceptation : 17/11/2020
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

RESUME
Les ruptures de stocks sont un problème que les magasins de distribution doivent faire face, en vue de recruter et fidéliser leurs clients. En effet, un taux élevé de ruptures dans le linéaire dans un magasin, entrainera une insatisfaction et un bouche à oreille négatif de la part des clients. La fidélité de ces derniers au magasin se trouve affectée.

Cette recherche vise à étudier l’impact de la fréquence des ruptures de stock dans la grande distribution généraliste, sur la fidélité de ses clients au Maroc. Notre étude a ciblé une population de 657 clients de différentes chaînes de grande distribution. Les résultats de notre étude ont montré que la fréquence des ruptures de stock affecte négativement la fidélité comportementale des clients.

MOTS CLES : Ruptures de stocks ; Comportement de fidélité ; Secteur de la grande distribution ; Le contexte marocain

ABSTRACT
The out-of-stocks (OOS) have become one of the major problems retailers have to resolve in order to retain their existing customers and attract new ones. This is particularly because the stock-outs rates could lead to non-satisfaction and negative word of mouth. This would affect the client loyalty toward the store.

Through this paper, we study the implications of frequent OOS situations in the customers’ loyalty behaviors in the large general retail sector in Morocco. Our study considers a population of 657 customers of the different large general retail chains in Morocco. Our research findings indicate that repeated OOS have a negative impact on the client’s behavioral loyalty.

KEYWORDS: Out-of-Stock (OOS); Loyalty behavior; Large retail sector, Moroccan context.
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

INTRODUCTION

Ever since its debut in Morocco in the beginning of the 1990s, the general retail sector has seen considerable progression, which has become even more prominent through the past decade. This is particularly due to the Moroccan customers’ changing behavior and their increasing reliance on the large distribution sector.

Large general retailers generally carry quite a diversified assortment of goods (food and non-food), in addition to a selection of services, namely product warranties, customer services, and credits to name a few. Nevertheless, food products remain the primary category of consumer goods holding the largest proportion of the sector’s turnover (Conseil de la concurrence, 2011).

In order to maintain competitiveness, large general retailers are forced to provide attractive offers while ensuring a good customer portfolio by attracting new customers, and most importantly, retaining existing ones. Indeed, considering the similarities in product offerings in this sector, retailers, with the objective of increasing their customers’ loyalty, could focus their strategic efforts more on offering a large and diversified assortment of products, ensuring high product availability and a high-quality inventory management or more proximity to their customers. In this regard, Orsini (2008) determined that the main performance indicator used in the retail sector is in fact the level of stock-outs at the store level.

Furthermore, other research has shown that customers generally perceive discrepancies with the retail logistics function and not the function itself; for instance, customers notice OOS situations, non-availability of sales items, close or passed due expiration dates on perishable products, but not good stock management practices (Aurifeille, 1999).

Through this research project, our objective is to evaluate the extent to which consumer loyalty behavior, towards a particular retailer, is affected by OOS occurrences, particularly when these are frequent.
1. OVERVIEW OF THE RELATIONSHIP BETWEEN STOCK OUT AND CUSTOMER LOYALTY IN THE GENERAL RETAIL SECTOR

The logistics functions in the retail sector consists of a large number of tasks and operations. However, for the purpose of our study, we focus primarily on the perceived aspects from the customers’ perspective, namely stock management, product availability, etc. Indeed, the quality of these operations plays a significant role in how customers actually view their preferred retail store (Bouzaâbia and Boumaiza, 2013). As a result, one of the major responsibilities under the logistics function is to optimize the management of, not only, the physical flow of goods, but also the flow of data that helps ensure that customers are served at the right place and at the right time, and also that stock-outs are reduced (Orsini, 2008).

Additionally, Bouzaâbia and Boumaiza (2013) add that, as OOS occurrences become more frequent, customers start to perceive their preferred retailer negatively, which eventually their loyalty towards the said-retailer to decline overtime. Moreover, Lichte et al. (2000) stipulate that there’s a direct correlation between reducing stock-outs through good logistics management and limiting possible customer losses. Needless to say that such losses could eventually become permanent if customers can easily find their desired products at alternative competing retailers (2000).

Ghesquiere (2007) and Garrouch et al. (2011) also indicate the presence of a strong correlation between the effectiveness of the logistics function in general retail and loyalty behavior of customers. Within the same scope, the studies conducted by the researchers Campo et al. (2000), Rani and Velayudhan (2008) and Turk (2012) have all concluded that customer loyalty towards a particular retail chain declines as customer are faced with stock-outs, particularly if these occur frequently.

Accordingly, the theoretical background of our research has helped us develop our research model, which enables us to evaluate and explain the causal relationship between frequent
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

stock-outs and the customer loyalty behavior towards large general retailers in the Moroccan context.

2. JUSTIFICATION OF THE CHOICE OF OUR VARIABLES AND MODEL STRUCTURE

The examination of the literature enabled us to determine the aspects of the retail logistics performance which influence the customer loyalty behavior towards large general retailers in the Moroccan context.

In the large distribution sector, logistics performance can be measured through multiple aspects, namely through product assortment size and diversification, product availability at the store, or more specifically on the shelves, or even the overall performance at the point-of-sale (Bouzaâbia and Boumaiza, 2013). However, for the purpose of our research, we chose to focus our study primarily on the frequency of stock-outs as it is considered to have the most prominent effect, and represents the main store logistics aspect that is generally perceived by customers (Bayle-Tourtoulou et al., 2006).

2.1. THE CONCEPT OF THE CUSTOMER LOYALTY

Customer loyalty has been studied for decades, yet some researchers still come up with new perspectives to consider it. Nevertheless, the definitions of loyalty are generally based on three theoretical approaches; the behavioral approach, the attitudinal approach and the mixt approach. According to Zeithaml (2000), we talk about a behavioral approach when the customers are loyal as long as they continue purchasing or using a particular product or service. The attitudinal approach, however, is when the customers have a “sense of belonging or commitment” towards a particular good or service (2000). The mixt approach is a combination of both the behavioral and the attitudinal approaches.

Most research studies define customer loyalty as “repeat purchasing” (Dick and Basu, 1994; Newman and Werbel, 1973; Oliver, 1997; Reichheld and Sasser, 1990). Nevertheless, Jacoby and Chestnut (1978) introduced the view that repeat purchasing, alone, could not be considered as the sole indicator of loyalty because in certain cases customers may repurchase the same brand or product by simple coincidence or because it is more convenient for them. Therefore, such inconsistent purchasing could in fact disguise loyalty if customers were multi-brand loyal. So in order to determine unbiased loyalty or disloyalty, other factors need to be
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

taken into account, namely the customers’ beliefs and intentions, and the elements that influence their behavior (1978).

Oliver (1999) on the other hand, describes loyalty as “a deeply held commitment to rebuy or patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.”

2.2 THE CONCEPT OF STOCK-OUTS

Out-of-stock (OOS) situations or stock-outs have been defined by different authors and in slightly different manners over the years. According to Aastrup and Kotzab (2009), an OOS situation refers to one where a product is not available in the desired form, flavor or size, not available in a saleable condition, or not available on the expected shelf.

By the same token, Vasconcellos and Sampaio (2009) define a stock-out as a situation where a product, which is normally sold at a given retail outlet and/or made available and accessible to the customers through a specific space on the shelves, is not available to the customer or consumer at the time of purchase.

Additionally, Zinn and Liu (2001) assert that in some (if not most) stock-out occurrences, the OOS product is in fact available at the store (in the back room or stocking area for example) but not on the actual shelf. Such discrepancies are generally due to human negligence and/or error (2001).

Other researchers however, consider stock-outs as instances where the desired product is not available on the shelf, regardless of whether or not it is in fact available in the stocking area of the store (Ghesquiere and Yapo’s, 2004). As such, for the purpose of our study, we will consider the definition suggested Ghesquiere and Yapo (2004), since, particularly when it is the case of mass consumption goods, customers tend not to ask department or aisle managers about every product they were unable to find on the shelves; instead, they simply decide which action to take (i.e. substitute the product, delay or cancel purchase or go to a different store) (Gobiraj and Nimalathasan, 2011).
Furthermore, Gruen at al. (2002) and Gruen and Corsten (2008) determined that the frequency of OOS situations within a given store also has a relatively significant impact on the customers’ decision to substitute the store. The authors explain that when a customer is confronted with a stock-out situation while making a planned purchase, s/he will have the tendency to substitute the store completely if the experience is recurrent 2.4 times on average. We can therefore say that the frequency of OOS situations has in fact an impact on the rate of store substitution, which indirectly impacts store loyalty (2008).

We will assume that the frequency of stock-out instances, has indeed an impact on the customers’ loyalty behavior, given that the frequency of stock-outs can push them to choose another store in the future, which could cancel out any loyalty behavior that the client would have developed earlier. We will take into account the two dimensions of loyalty (behavioral and attitudinal) Hence our hypotheses:

**H1**: High OOS frequency reduces customer loyalty towards a large general retailer.

**H1.a**: High OOS frequency reduces customer’s behavior loyalty towards a large general retailer.

**H1.b**: High OOS frequency reduces customer’s attitude loyalty towards a large general retailer.

With that, we present our research model as follows:

**Fig 1. The proposed research model**

3. **METHODOLOGY**

In order to tackle our research question, we intend to conduct exploratory research using a questionnaire on a sample of n ≈ 657. This was calculated using the quota sampling method,
where the six major cities in Morocco are represented (Tangier, Fez, Rabat, Casablanca, Marrakech and Agadir) by taking into account the proportion of each one in relation to the overall population. To do this, we developed a causal model based on hypotheses derived from the literature.

However, to measure the theoretical concepts deployed (OOS frequency, and loyalty), we relied on items that were used in previous research (Garouch et al, 2011; Clottey et al, 2008; Campo et al, 2000; Guren and Corsten, 2008), in addition to some items that are specific to the Moroccan context, which we developed based on semi-structured interviews with customers and some managers at the different large general retailers.

Moreover, in order to develop our measuring tools, we followed the approach proposed by Evrard et al., (2003), which is an improvement of the famous paradigm of Churchill (1973). Indeed, we generated items in the first phase, then we purified them in a first pre-test of our questionnaire through the use of the coefficient of Cronbach’s Alpha (αc). The next step was to validate our model by testing its internal coherence, as well as the strength of the connections on which it is based. The items are evaluated through a Likert five-point scale.

The estimation of our model will be performed by the method of linear structural relationship based on maximum likelihood (LISREL). Data analysis was performed using SPSS Version 21 and AMOS version 23.

4. RESULTS AND DISCUSSION
In analyzing the data collected during this study, we first conducted a descriptive analysis. Indeed, we had administered our questionnaire to a sample of 657 customers, either through face-to-face contact or by the means of Google Drive. As a result, we received feedback from 471 respondents (70.19% females and 29.1% males), which constitutes a satisfactory response rate of 71%. Our sample consists of large general retail customers of different backgrounds and different age groups where 42% are aged 26-33 years old, 29.1% aged 34-40 Y.O, 12.1% aged 18-25 Y.O, 9.6% aged 41-50 Y.O, and 7.2% aged over 50 Y.O. Furthermore, we note that
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

82% of our sample do not exceed a budget of 2000 DH when it comes to purchases made at the large general retailers.

Additionally, we found that the large general retailers’ customers choose their store chain by taking into account several criteria. Indeed, the majority of respondents in our sample (56.4%) consider the proposed promotions as the number one choice criterion, followed by guarantees and possibility of exchange at 43.2%, the stores’ proximity at 28.9% and the recommendations of family and friends at 21.5%. Helpfulness of the staff, however, has no weight in the choice of the retailer, which is mainly due to the scarcity of direct interactions between customers and store personnel.

Moreover, one cannot speak of consumer loyalty to the brand without considering seniority thereof in relation to a given retailer. Indeed, Meyer-Waarden (2002) considers that a customer can only be considered loyal if he has maintained a relationship with a retailer for a minimum of four years. We note then that this condition is met for more than 75% of our sample.

Subsequently, the exploratory analysis enabled us to prove that the items used to measure each of the variables involved in our model (OOS frequency, and customer loyalty to the retailer) were very reliable. Indeed, Cronbach’s alpha relative to each variable is greater than or equal to 0.70. In addition, in general, the inter-item correlation matrices for all variables have a significant correlation to the threshold of 1%. To this end, we can conclude that our measurement scales have overall good reliability. These results are summarized in the following table:

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>KMO &amp; Bartlett</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>OOS Frequency</td>
<td>53.803</td>
<td>0.604 – 0.000</td>
<td>0.702</td>
</tr>
<tr>
<td>Attitudinal Loyalty</td>
<td>69.647</td>
<td>0.632 – 0.000</td>
<td>0.774</td>
</tr>
<tr>
<td>Behavioral Loyalty</td>
<td>64.375</td>
<td>0.700 – 0.000</td>
<td>0.807</td>
</tr>
</tbody>
</table>

AVE: Average variance explained; 0.000: significant at 1% level
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

The table shows that in regard to the AVE (Average Variance Explained) criterion, all constructs meet the convergent validity. Subsequently, we conducted the external validity of the model analysis, which lies in its capacity to explain most of the variability of the different constructs. In other words, the more the model captures the variations of the variables to explain, the more it will serve as an explanatory and predictive tool of the phenomenon we are trying to study. Hence, to test the external validity of the model, we used the indicators of: CMIN/DF (The minimum discrepancy); GFI (Goodness of Fit Index); RMR (The root mean square residual); TLI (Tucker Lewis Index); CFI (Comparative Fit index) and RMSEA (Root mean square error of approximation). The test results are presented in the following table:

Table 2. Model adjustment indicators

<table>
<thead>
<tr>
<th>Indices</th>
<th>Values</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit Indices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>0.964</td>
<td>&gt; 0.8</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.040</td>
<td>&lt; 0.09</td>
</tr>
<tr>
<td>RMR</td>
<td>0.023</td>
<td>Lowest value</td>
</tr>
<tr>
<td>Baseline comparisons Indices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>0.938</td>
<td>&gt; 0.8</td>
</tr>
<tr>
<td>TLI</td>
<td>0.904</td>
<td>&gt; 0.8</td>
</tr>
<tr>
<td>Discrepancy Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>1.726</td>
<td>1&lt;CMIN/DF&lt;5</td>
</tr>
<tr>
<td>Default model</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chi-square = 149.015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Degrees of freedom = 85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probability level = 0.000</td>
<td></td>
</tr>
</tbody>
</table>

From this table, we can conclude that our model is well adjusted. In fact, all indices are significant according to the signification levels recommended by Arbuckle (2007). The error estimation (RMSEA) is less than 5 percent and the residual doesn’t exceed 3 percent. The TLI (Tucker Lewis Index) shows that our results are not affected by the size of the sample and the GFI has a big value (more than 90%) proving an excellent model fit. Additionally, we note that in order to enhance our model fit quality and to push improve our statistical analysis, we introduced some control variables: Customer’s criteria for choosing the preferred retailer (Price; Product quality; Product diversity and Product availability), large general retailer (Carrefour; Marjane; Aswak Assalam; Atacadao and Marjane Market) and finally, customer’s city of residence (Agadir; Casablanca; Rabat; Fez; Tangier; Marrakech and Rabat).
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

In summary, we present our estimation results through the following table:

Table 3. Synthesis of the estimation of the model’s parameters (structural relationships)

<table>
<thead>
<tr>
<th></th>
<th>Behavioral Loyalty</th>
<th>Attitudinal Loyalty</th>
<th>Product Prices</th>
<th>Product Quality</th>
<th>Product Diversity</th>
<th>Product Availability</th>
<th>OOS Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>OOS Frequency</td>
<td>-0.120**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large general retailers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marjane</td>
<td>0.039***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aswak</td>
<td>0.191**</td>
<td>0.044**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assalam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.045**</td>
</tr>
<tr>
<td>Attacadao</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.043***</td>
</tr>
<tr>
<td>Carrefour</td>
<td>-0.214**</td>
<td>0.041**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marjane Market</td>
<td>-0.667***</td>
<td>-0.044***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store choosing criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Prices</td>
<td>0.094***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Quality</td>
<td>-0.075*</td>
<td>0.103***</td>
<td>0.271***</td>
<td></td>
<td>0.211***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Diversity</td>
<td></td>
<td></td>
<td></td>
<td>0.305***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Availability</td>
<td>0.207***</td>
<td>0.220***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***: Significant at the threshold of 1%; **: Significant at the threshold of 5%

In order to interpret the table, we start with the effect of OOS frequency on loyalty before looking into the variables that influence each one of them (store choosing criteria and the large general retailer).

According to the results, it is to say that an increase in OOS frequency reduce customer’s behavioral loyalty toward the store. In fact, when OOS frequency goes up by 1, the loyalty behavior goes down by 12%, however the impact of the OOS frequency on attitudinal loyalty seems to be statistically not significant. According to this result, we can accept the hypothesis \(H1.a\) and reject the hypothesis \(H1.b\). Subsequently, we may partially accept the hypothesis \(H1\).
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

Furthermore, customers that shop at Attacado, face stock-outs more often than those of the other retailers, that’s why it’s not the most preferred retailer by the customers. When the customers are facing a high frequency of OOS, they seek for products diversity and availability at any store. Also, our results suggest that attitudinal loyalty may be affected positively by low prices, product quality and mainly by products availability.

The products at Marjane store are more available compared to Aswak Assalam, as the latter sees more frequent stock-outs. When a retailer provides a large assortment size and diversity, customers start to expect higher product quality, which is available at Carrefour but not at Marjane Market. Marjane Market is the most expensive store compared to Aswak Assalam.

Furthermore, any study about customer behavior must take into consideration the sociocultural environment. Because of that, we considered the city of residence as an additional distinction between customers. We intend to use this aspect in order to examine whether all Moroccan customers behave similarly or if their behaviors change based on their sociocultural environment. The following table summarize the significant results:

Table 4. Moroccan’s loyalty behavior estimation in terms of store choosing criteria and cities

<table>
<thead>
<tr>
<th>Loyalty</th>
<th>Store Choosing criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Behavioral Loyalty</td>
</tr>
<tr>
<td>Fes</td>
<td>1.504***</td>
</tr>
<tr>
<td>Casablanca</td>
<td>0.596***</td>
</tr>
<tr>
<td>Rabat</td>
<td>1.358***</td>
</tr>
<tr>
<td>Marrakesh</td>
<td>0.407**</td>
</tr>
<tr>
<td>Tangier</td>
<td>0.429**</td>
</tr>
<tr>
<td>Agadir</td>
<td>-0.747***</td>
</tr>
</tbody>
</table>

***: Significant at the threshold of 1%; **: Significant at the threshold of 5%

The table above shows clearly that there is a gap between customer behaviors according to the cities of residence. In fact, customers living in the south are completely different from those from the north. As we can see, customers from Fes, Casablanca and Rabat chose a retailer based on the product quality offered. However, customers from Agadir do not care about the product quality. People from Marrakesh and Tangier are not affected by the
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

frequency of OOS, which is why they develop more of a behavioral loyalty (repeat purchasing) without expressing any negative attitude toward stores.

To sum up, we were able to partially accept the hypothesis H1, and we were able to determine that frequent OOS situations directly reduce customer loyalty behavior. Nevertheless, the behavior of a customer facing an OOS frequency would depend on the criteria he or she has relied upon to select a preferred store, along with his socio-cultural environment.
GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?

CONCLUSION

Through this research, we tried to study the relationships between OOS frequency and the customers’ loyalty behavior towards a large general retailer in the Moroccan context.

One of the main objectives of our research was to determine the existence of a direct relationship between OOS frequency and customer loyalty towards a large general retailer. Indeed, our study allowed us to confirm the direct relationship but not for the both dimensions of customer loyalty (attitudinal and behavioral). Actually, our results confirm Turk’s (2012) findings, which established that OOS frequency negatively affects customer loyalty, which may cause considerable losses to the company’s customer portfolio levels and therefore a decrease in Sales.

Although our research study allowed us to test the choice criteria for preferred retailer and their role in the explanation of the loyalty behavior. In fact, we observed that the customer is influenced by his city of residence. We were also able to establish that customers value retailer choice criteria (price; quality; availability and diversity) differently based on their socio-cultural environment, which impacts their loyalty behavior towards the retailer in question. Results also show that the customer attitude can be influenced positively by the retailer’s actions, like offering low prices, good product quality and providing a good retail supply chain management. In fact, we find that the more products are available at the store, more the customer loyalty attitude become positive toward the retailer. Consequently, the managers at these large general retailer stores should ensure good product availability in on the shelves.

Additionally, our results further establish that retailers should take into account the Moroccan customer’s behavior and how it is influenced by his or her city of residence or socio-cultural environment. Every state or region in Morocco has its own culture and consumption behavior, related to the habits, traditions, beliefs, and financial means. These factors affect the customer loyalty behavior.

Although our research study has led to relatively strong results, it has some limitations. Indeed, considering the nature of our questionnaire, the customers’ answers could have been biased to the extent that they opted in reality for a reaction other than the one they have declared when they responded to the questionnaire, or if there was an extended period of
time between the instance of OOS they had to face and the actual administration of the questionnaire, there could be some discrepancies due to forgetfulness or state of mind. Also, our study at this level, can’t explain how the customer city of residence affects his or her preferences and behavior toward a given large general retailer, and why is the customer more inclined to choosing some retailer choice criteria more than others?

By highlighting the above-mentioned limitations, we can raise potential research venues. Indeed, we can study the phenomenon of stock-outs; however, through an experimentation study, by observing actual behavior adopted by customers, which would allow us to release more concrete conclusions on the impact of OOS on customer loyalty behavior.

Moreover, we can try to optimize our current research model by incorporating situational factors (emergency of purchase as an example) or other variables like customer satisfaction, commitment, trust and reactions to OOS situations; that can indeed influence or be influenced by customer behavior in response to stock-outs. Further, we can consider the integration of other variables such as the perceived costs of the change in relation to the reactions of "product substitution" and "store substitution," respectively. Finally, it would also be interesting to conduct a study taking into account a specific product categories (food, personal hygiene, household items, etc.) to verify if the relationships validated in our model are indeed maintained when the OOS events concern a particular product category.
REFERENCES


GENERAL RETAIL STOCK-OUTS: TO WHICH EXTENT IS THE CONSUMER BEHAVIOR AFFECTED?


