Customer satisfaction is paramount to businesses success. It has been researched in business and marketing since the 1970s. If customer satisfaction is achieved brand loyalty often results. Because of that, brand loyalty has also been heavily researched in the last few decades. The purpose of the current research was to determine the drivers of customer satisfaction and brand loyalty, as well as examining the relationship between the two. Our investigation examined the effects on the marketing mix (the 7 Ps, including price, promotion, place, etc.) on customer satisfaction and brand loyalty at McDonald’s restaurants in Morocco. A quantitative method was used in the study, with a survey research design. The results of the study indicate that the marketing mix does indeed influence customer satisfaction and brand loyalty. Implications of the findings are beneficial for both scholars and practitioners of marketing and business.

Key words: McDonald’s, customer satisfaction, brand loyalty, fast food, Morocco, Africa.

INTRODUCTION

The fast food industry has experienced tremendous growth since first coming to Morocco in the last decade of the 20th century (Blooming, 2015). Busier lifestyles have resulted in less time for home-cooked meals, and fast food provides a solution to this change (Fast Food in Morocco, 2018; Koerten, 2017; Smith, 2017). Several fast food restaurants have opened in Morocco, including Subway, Dairy Queen, KFC, Dunkin Donuts, McDonald’s, Burger King and Pizza Hut since the early 90’s (KFC-Arabia, 2017; Fast Food Restaurants Booming in Morocco, 2015). McDonald’s was the first to open, not only in Morocco, but was also the first McDonald’s to open on the African continent on December 18, 1992 (First McDonald’s, 1992).

Of course Africa is a huge continent with several countries, each one having its own unique culture. Although the first McDonald’s appeared in Morocco, there are McDonald’s restaurants in three other countries in Africa: Egypt, South Africa, and Tunisia (McDonald’s Corporate, 2019). Another source (Verdict, 2017) also includes Mauritius as an African country, though McDonald’s Corporate (2019) lists that country as part of Asia and Oceania. Although McDonald’s exists in only four or five African countries, including Morocco, it is important to understand the cultural differences between the countries where McDonald’s presently has stores, and to understand the cultures differences in the countries where McDonald’s is not. According to

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Shamaha et al. (2018: 451):

The African continent is made of several regional realities, each one expressing a unique mixture of context-specific attributes. Characteristics of regional areas of the African continent greatly vary between one another. These relevant differences must be fully explored and evaluated, calling for further research efforts.

The current investigation seeks to fill the void identified by Shamaha et al. (2018) by identifying the culturally specific aspects of Morocco and the “context-specific attributes” (Shamaha et al., 2018: 451) of McDonald’s Maroc in particular.

McDonald’s is one of the world’s largest fast food chains (Bailey, 2017), and is the most popular international fast food restaurant in Morocco. In 2017, McDonald’s operated 43 locations throughout the country with more than 2,600 employees (McDonald’s Maroc, 2017). Since that first McDonald’s was opened, the fast food industry in Morocco has become more popular every year: McDonald’s being the market share leader (Fast Food in Morocco, 2018). And although the data demonstrate that Moroccans frequent McDonald’s in large numbers, little to no research has determined what it is that makes Moroccan customers so satisfied with and loyal to McDonald’s in Morocco.

In this report, we analyze the effects of the marketing mix on customer satisfaction and brand loyalty at McDonald’s franchises in Morocco (referred to hereafter as McDonald’s Maroc). The marketing mix was first conceived by McCarthy (1960), and is defined as the “set of marketing tools that the firm uses to pursue its marketing objectives in the target” (Kotler, 2000:9). The initial marketing mix was operationalized as the four Ps—price, product, place, and promotion—but was later extended to include other elements of marketing, including packaging, positioning, and people (Tracy, 2004).

As stated above, the first and most famous fast food chain established in Morocco is McDonald’s, which opened its first store in Casablanca in December, 1992. In 2013, McDonald’s Maroc generated revenues over 863 million Moroccan dirhams. In 2015, McDonald’s Maroc maintained 15% market share in the fast food industry in Morocco. Owning 40 establishments throughout in Morocco as of 2018, McDonald’s Maroc is the most recognized fast food restaurant amongst students, families, and young children (Fast Food in Morocco, 2018). As well, and quite important in Morocco, McDonald’s Maroc assures its customers that all its products are halal, prepared following strict rules regarding the religion of Islam (McDonald's Morocco, 2018).

As is true for franchises worldwide, McDonald’s Maroc must adhere to specific standards set by the parent company. McDonald’s dictates several guidelines that every franchise must follow so that the customer experience is consistent worldwide. If a franchisee fails to comply with these very detailed regulations (regarding menu offerings, hygiene, processes, hiring policies, etc.), he or she may lose their McDonald’s franchise license.

Indeed, McDonald’s has nullified many franchise contracts in the past for breaches in the contract (Keegan, 2017). To meet McDonald’s expectations for franchisees, all McDonald’s worldwide, and specific to our research, McDonald’s in Morocco restaurants must train their personnel so they understand McDonald’s specific policies and procedures, including operations, marketing management, and the needs of the local region (Booming, 2015).

LITERATURE REVIEW

Customer satisfaction

Since the latter part of the 20th century, customer satisfaction has been a topic of great interest to organizations in all market sectors, including, for example, the airline industry, the hospitality and tourism industry and the food service sector (Anderson and Sullivan, 1993; Churchill and Surprenant, 1982). However, before the 1980s, most businesses were not customer focused. Rather, they were focused on products, and if customer satisfaction was evaluated, it tended to be measured informally (Dayr et al., 2003). “Customer satisfaction refers to a person’s feelings of pleasure or disappointment” (Kotler and Keller, 2011: 144) compared to his or her expectations, post-purchase (Soriano, 2002; Srivastava and Rai, 2018).

Customer satisfaction has most likely been an important key to success since the first forms of trading and economic exchange existed. In modern theory and practice, customer satisfaction is viewed as one of the most important drivers of organizational success and a key component of marketing (Erevelles and Leavitt, 1992; Kurian and Muzumdar, 2017; Leninkumar, 2017; Morgan et al., 1996; McQuitty et al., 2000). The importance of customer satisfaction in marketing results from its role as a predictor of consumer buying behavior (Anderson et al., 1994, 2004; McQuitty et al., 2000).

Customer satisfaction is “the summary of psychological state that results when the emotion surrounding disconfirmed expectations is coupled with prior feelings about the customer experience” (Oliver 1999: 28). Later, Oliver (2014: 262) elaborated on the concept of customer satisfaction and provided a more comprehensive definition, stating that satisfaction is “the consumer’s fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provides (or is providing) a pleasurable level of consumption-
related fulfillment, including levels of under- or over fulfillment.” Noted marketing scholar Kotler (2000: 36) offers his definition, stating that: “customer satisfaction is a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance or outcome in relation to his/her expectations.” An important element is identified by Kotler (2000), when he makes perception of an explicit component of customer satisfaction. An organization may be doing everything it can to create customer satisfaction, but organizations have only limited control over the process; customer perception is also a key determinant in customer satisfaction.

As mentioned above, customer satisfaction has been an important part of any exchange economy since people first began giving something of value to receive something needed or desired (Sudiarta and Karini, 2017; Weber, 1981). Modern research, however, began much more recently. Customer satisfaction has typically been the purview of marketing scholars and practitioners; the first research in the marketing field beginning in the latter part of the 20th century.

Marketing research and theory has provided both conceptual and operational definitions of customer satisfaction that revolve around expectations (Saleh, 2015). To put it simply, customer satisfaction is achieved when the expectations of the customer are met (Kotler et al., 2017). According to Patel customer satisfaction is all about expectations. He states that “the expectations that customers have today were shaped by their previous experiences. Businesses need to meet or exceed these customers’ expectations” (Patel nd, para. 1).

Operationally, “customer satisfaction is a measure of how your organisation’s total product performs in relation to a set of customers’ requirements” (Hill and Alexander, 2006: 2; c.f., Shankar et al., 2003). Requirements of customers are therefore antecedents of customer satisfaction (Matzler et al., 2015). Organizations achieve satisfied customers when customer expectations are translated into the organization’s operating procedures and systems (Hill and Alexander, 2006).

Cadotte et al. (1987) developed what they refer to as the paradigm of disconfirmation of expectations. According to their paradigm customer satisfaction involves a comparison between the organization’s performance and the customer’s expectations. Cadotte et al. (1987) state that there are three possible outcomes: (1) confirmation, (2) positive disconfirmation, and (3) negative disconfirmation. Confirmation occurs when the organization’s performance equals customer expectations, which results in neutral feelings. Positive disconfirmation occurs when the organization’s performance is perceived as being better than expected, which results in customer satisfaction. Negative disconfirmation occurs when the organization’s performance is perceived as being worse than expected, which results in customer dissatisfaction (El-Manstrly, 2016).

A distinction is made in the marketing literature between transaction-specific and cumulative customer satisfaction (Andresan, 2000; El-Manstrly, 2016; Johnson et al., 1995). Transaction-specific customer satisfaction occurs after the product is consumed and involves an evaluation of one specific purchase (Oliver, 1980, 1993). Cumulative customer satisfaction is a consumer’s comprehensive evaluation of product purchases and subsequent consumption over time (Fornell, 1992; Han et al., 2018; Johnson and Fornell, 1991; Nguyen et al., 2018). Cumulative customer satisfaction is argued to be more valuable than transaction-specific satisfaction when predicting consumer buying behavior, as well as the performance of the organization (Fornell et al., 1996; Johnson et al., 2001; Nguyen et al., 2018). Customer satisfaction, whether transaction-specific or cumulative, is associated with the level of affection customers have of the organization and its brand(s). Oliver (1999, 2014) noted that customers develop a positive attitude towards the brand when they experience satisfaction, and that repetitive experiences (cumulative satisfaction) increases customers’ positive attitudes.

Brand loyalty

Brands are complicated entities; they are not living things, but are given human qualities, such as personalities by brand managers. When brand management is successful, brands are thus personalized and perceived by consumers as more than inanimate phenomena, but rather as a curiosity with which one can develop a relationship (Keller and Lehmann, 2006; Su and Tong, 2015; Veloutsou, 2015). By attributing human qualities to a brand, brand personality “is something to which the consumer can relate” (Gunawardane, 2015: 102). As argued by Su and Tong (2015: 124),

Brand personality indicates consumers’ perceptions of personality traits of brands and further helps create and build meaningful consumer-brand relationships. A well-established brand personality can help leverage a set of unique and favorable brand images and thus enhance the value of brand equity.

Building brand personality is thus an essential marketing process, since brand personalities help develop personal relationships between brands and consumers. When such relationships between brands and consumers exist, loyalty increases (Su and Tong, 2015). To build positive relationships with customers, brand managers must develop such “marketing strategies effectively as a means to satisfy customer needs and build customer
loyalty” (Hwang et al., 2019: 19). McDonald’s has a unique brand personality that is promoted by the company and perceived by consumers as “family-oriented, friendly, cheerful, up-to-date and confident” (Cui et al., 2008, p. 536). Family orientation is exemplified by McDonald’s playgrounds and the popular McDonald’s Happy Meal. McDonald’s is viewed as cheerful and friendly in part because of Ronald McDonald, the company mascot and spokesperson. Because of McDonald’s global success (Kabbassi, 2008), the company is viewed as a confident corporate leader. McDonald’s is also viewed by consumers as “imaginative, young, spirited, and trendy” (Cui et al., 2008: 536).

As argued by Su and Chang (2018: 94), “the focus of business activities is no longer solely on competing for new customers, but also on securing the loyalty of existing ones.” Oliver defined brand loyalty as “a deeply held psychological commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing” (Pritchard et al., 1999). More recently, Giovanisa and Athanasopoulou (2018: 288) defined brand loyalty as “the extent of faithfulness of consumers to a particular brand, irrespective of the marketing activities of competitive brands.”

Customer satisfaction and brand loyalty

Much research has investigated the customer satisfaction—brand loyalty relationship (Auh and Johnson, 2005; Balabanis et al., 2006; Lin and Bennet, 2014; Ngo and Nguyen, 2016; Olsen, 2007; Suh and Youjae, 2006; Szymanski and Henard, 2001; Veloutsou, 2015; Yang and Peterson, 2004). Gallarzaa and Saura (2006) conducted research on customer satisfaction and brand loyalty and found that “customer satisfaction is a direct antecedent of customer loyalty” (2006: 444). When customer satisfaction is achieved, consumers are less likely to switch to competing brands, are more likely to recommend the brand to others, and more likely to continue purchasing from the brand (Bennett and Rundle-Thiele, 2004; Haghighi et al., 2012). Many other empirical studies found that customer satisfaction influences brand loyalty (Han and Ryu, 2009; Lai et al., 2009; Liu and Jang, 2009; Namkung and Jang, 2007; Ryu et al., 2008, 2012).

Several studies demonstrate that customer satisfaction is an antecedent of brand loyalty, as well as associated variables including brand attitude and brand repurchase intention (Bennett and Rundle-Thiele, 2002; Edgecomb, 2015; Pizam et al., 2016; Russell-Bennett et al., 2007). Customer satisfaction increases brand loyalty when operationalized as the number of consecutive purchases of the same brand (Lee et al., 2015; Mittal et al., 1998). Other research demonstrates that evaluation of a product purchased and consumed results in two specific aspects of brand loyalty—attitudinal loyalty and purchase loyalty—both of which determine whether repeat purchasing is obtained (Awan and Rehman, 2014; Trail et al., 2016).

Research questions

The purpose of the current investigation is to provide a deeper understanding of Moroccan customer satisfaction and brand loyalty to McDonald’s in Morocco. Specifically, our objectives are to: (1) examine the impact of the marketing mix (operationalized by four independent variables: price, food quality, service quality, and physical environment) on customer satisfaction and brand loyalty at McDonald’s in Morocco; (2) analyze the relationship between customer satisfaction and brand loyalty; and (3) make suggestions for enhancing both customer satisfaction and brand loyalty in the fast food industry. To achieve the objectives of the study, the following research questions were developed to guide the quantitative investigation that follows:

RQ1: How does the marketing mix affect customer satisfaction and brand loyalty at McDonald’s Maroc?
RQ2: How does customer satisfaction affect brand loyalty at McDonald’s Maroc?
RQ3: What is the relationship between customer satisfaction and brand loyalty at McDonald’s Maroc?

The drivers of customer satisfaction have been identified in the research literature and include price, employee courtesy, timely service, competence of staff, food quality, accessibility, and cleanliness (Gilbert et al., 2004; Khan et al., 2013; Puri and Kumar, 2014). In the current research, we conceptualize and operationalize these drivers as the marketing mix, also known as the 7 Ps of marketing, which include price, product, place, promotion, packaging, positioning, and people. We operationalize the 7 Ps as price (P), food quality (FQ), product packaging), service quality (SQ; people, promotion), and physical environment (PE; place, positioning).

Marketing mix effects on customer satisfaction and brand loyalty

Price

As with any other industry, price is an important variable in the fast food industry (Andreyeva et al., 2010). Customer perception determines value, which is defined as price + quality. Customer perception of the value for a product therefore requires that quality products are offered at a price consistent with the product offering
(Kim et al., 2006). Because of the importance of price, it is a traditional element of any marketing plan, known to influence customer behavior (David et al., 2014). Furthermore, the right combination of price and quality-value has always been a key driver of companies that operate in the fast-food industry (Ryu and Han, 2010). Therefore, value, or price fairness is a determinant of a buyer's expectation and affects customer satisfaction (Andaleeb and Caskey, 2007).

Andaleeb and Caskey (2007) found that in more than 100 restaurants, price was highly correlated with satisfaction. Those authors found that an overpriced product might negatively affect customer experience. In other words, if the product received was not worth the price paid, the customer experience is diminished (Lemon and Verhoef, 2016). Considering these factors, marketing managers seek to find the perfect balance to align price and customer expectations to create customer satisfaction. To test the relationship between price and customer satisfaction, as well as price and brand loyalty, the following hypotheses are posited:

Hypothesis 1: There is a positive relationship between price and customer satisfaction.

Hypothesis 2: There is a positive relationship between price and brand loyalty.

**Food quality**

The relationship between food quality and customer satisfaction in the fast food industry is proven to be one key to success (Namin, 2017). Several components of food quality exist, including, (1) the freshness of the ingredients, (2) taste, (3) quality consistency, and (4) appearance (Namkung and Jang, 2007; Rozekhi et al., 2016). Global fast food franchises such as McDonald's are therefore faced with a challenge: they must ensure (1) that all of their venues throughout the world have access to all the necessary ingredients for their food offerings; (2) that the ingredients are available when needed; and (3) that the food is fresh. Furthermore, all employees must be trained so that a consistent level of food preparation and McDonald's global mandates are maintained.

Given that McDonald's Maroc is a fast-food restaurant, the franchise must therefore ensure that food quality is consistent from one restaurant to the next in all 40 locations throughout the country. Customer expectations regarding food quality at McDonald's Maroc were established when the restaurant chain opened in Morocco in 1992; even before that for McDonald's Maroc customers who had eaten at McDonald's internationally. Maintaining customer expectations is both a challenge and a requirement for success. The result is that either the food quality is what customers expect, or the food quality fails to meet customer expectations (Peri, 2006). If expectations are met, customer satisfaction is maintained and brand loyalty may result (Bloemer and Kasper, 1995).

Singh and Sirdeshmukh (2000) found that food quality is one of the most important attributes that lead to customer satisfaction. Other studies have also focused on food quality, identifying three key components: taste, appropriate temperature and presentation of the food served (Goh et al., 2008; Kivela et al., 1999; Koo et al., 1999; Namkung and Jang, 2007, 2008). These studies found that food quality has a high impact on customer satisfaction and brand loyalty. To test the propositions put forth by previous research, we hypothesize the following:

Hypothesis 3: There is a positive relationship between food quality and customer satisfaction.

Hypothesis 4: There is a positive relationship between food quality and brand loyalty.

**Service quality**

Service quality is defined as the level of service provided by a company, and whether that service is perceived to have met a customer's expectations (Saedi et al., 2017; Asubonteng et al., 1996; Wisniewski, 1996). Therefore, the difference between the perceived service and the expected service is the service quality provided (Hyun, 2010). Obviously, when the expected service quality is higher than the received service quality by the company, the customer will not be satisfied, or at least not as content as he or she would have been if expectations had been met (Hamari et al., 2017; Lewis and Mitchell, 1990; Reichheld and Sasser, 1990).

Like all retail industries, service quality in fast food restaurants is of a vital importance, and a key determinant of customer satisfaction (Warraich et al., 2013). It is one of the most important things that a client looks for in retail customer experiences (Meyer, 2007). Service quality is also considered an important factor that can help firms differentiate themselves from their competitors. Key indicators of service quality include employees' friendliness and personality, shorter time serving meals, responsiveness, and ability of employees to answer clients' questions and quick reactions to clients' concerns and problems. Frontline employees have a predominant role, since they provide service, and therefore directly affect service quality (Jamal and Anastasiadou, 2009).

Previous research (Chow et al., 2007; Soriano, 2002) has confirmed the importance of service quality in fast food restaurants and found that the quality of service significantly impacts customer satisfaction and brand loyalty. Gilbert et al. (2004) conducted research on five well-known fast food franchises in the United States, demonstrating that service quality is highly correlated with customer satisfaction. Several other studies have
also confirmed the important role of service quality on customer satisfaction (Liu et al., 2017). From the previous research regarding the relationship between customer satisfaction, brand loyalty and service quality, the followings are hypothesized:

Hypothesis 5: There is a positive relationship between service quality and customer satisfaction.

Hypothesis 6: There is a positive relationship between service quality and brand loyalty.

**Physical environment**

The fourth independent variable is the physical environment of the restaurant. The physical environment entails all elements of the physical establishment that impact customer satisfaction, including ambient conditions (light, color, shapes, scent), spatial layout, signs, symbols, and artifacts (Morales et al., 2015). These elements are designed by the organization to create an image, direct customers through their experience and give them the chance to create a relationship with the establishment (Shen and Bae, 2018).

The importance of the quality of the physical environment in the fast food industry has been demonstrated by previous research (Kurian and Muzumdar, 2017; Mason et al., 2016). Given the key role the physical environment plays in the fast food industry, the current research tests the relationship between the physical environment and customer satisfaction. Many studies have been conducted to understand the relationship between environment quality and customer satisfaction, but the results from those studies vary. Some studies have found no significant relationship between customer satisfaction and environment quality while other research has found a positive relationship between the two (Shen and Bae, 2018). Andaleeb and Conway (2006), for example, found that the restaurant design had no impact on customer’s satisfaction. Han and Hyun (2017), however, found that physical environment is a key determinant driving customers’ satisfaction. In the current research, we argue that the physical environment has a positive impact on customers’ satisfaction and brand loyalty. Therefore, the following hypotheses are put forth:

Hypothesis 7: There is a positive relationship between environment quality and customer satisfaction.

Hypothesis 8: There is a positive relationship between environment quality and brand loyalty.

**The relationship between customers’ satisfaction and brand loyalty**

Research demonstrates that customer satisfaction is an important antecedent of brand loyalty (Ahmed et al., 2014; Awan and Rehman, 2014; Homburg et al., 2005). When customer satisfaction for the product is achieved, customers are more willing to recommend the brand to others, and are more likely to become loyal to the brand (Albarracin and Wyer, 2000; Cronin and Taylor, 1992; Lee et al., 2015). Following logically from the extensive literature and research on the relationship between customer satisfaction and brand loyalty, we put forth the following hypothesis:

Hypothesis 9: Customer satisfaction is positively related with brand loyalty.

**MATERIALS AND METHODS**

A quantitative method was used to test the hypotheses generated in the current study (Klees, 2017). For this investigation, the analysis of variance (ANOVA) was used to measure the impact of the independent variables, price (P), food quality (FQ), service quality (SQ), and physical environment (PE) on the dependent variables, customer satisfaction (CS) and brand loyalty (BL). We used a survey research design to assess the impact of the independent variables (P, FQ, SQ, PE) on the dependent variables (CS and BL) (Cook and Cook, 2016). The survey consists of 17 statements to which participants responded. Participants were instructed to indicate their level of agreement, using Likert items ranging from 1-5, from strongly agree to strongly disagree. The final section of the survey included demographic questions, which allowed description of participants included in the sample.

**Population and sample size**

The population for this study includes all Moroccans who have ever visited a McDonald’s in Morocco. From that population, a sample was drawn. The sample was not limited to a specific region or city, given that it was online. To determine the appropriate sample size, we calculated the total number of the population (all Moroccans who have frequented a McDonald’s in Morocco), Goubraim and Chakor (2015) found that an average of 88.7% of the entire Moroccan population has visited a fast food chain within the country. When multiplied by the total Moroccan population, the result is 31,045,000 Moroccans who have visited a fast food restaurant. Furthermore, Chakor found that 45% of fast food visitors preferred McDonald’s, which further narrows the number of people who frequent McDonald’s to (31,045,000 x 0.43) 13,349,350 people. With the help of an online sample size calculator (The Survey System, 2018), a confidence level of 95% and a confidence interval of 8%, the required sample size was 150 participants.

**Instrumentation**

An explanation for the survey was clearly stated along with the amount of time it would take participants to complete (about 5 min). Also included in the questionnaire instructions was a brief statement that clarified to participants that in this questionnaire, we were only interested in participants’ experiences with McDonald’s in Morocco. Finally, participants were told that their responses were anonymous. For the research measures, the following scales were used: Brand loyalty was measured with three items developed by Zeithaml et al. (1996), which are reputation, recommendation and
performance. Price had a single item employed by Auty (1992), Hyun (2009), and Law et al. (2008), which operationalized price fairness. Food quality was operationalized with three items previously employed by Namkung and Jang (2007): taste, food temperature and food presentation. Service quality was also operationalized with three items, developed by Namkung and Jang (2007): employees’ competence, order mistakes and service time. Physical environment was operationalized with three items adapted by Kivela et al. (1999) and Law et al. (2008): cleanliness, décor, and ambiance.

**Data collection technique**

Once the questionnaire was created, it was uploaded to surveymonkey.com, which gave the participants immediate access to the McDonald’s Maroc survey (Appendix ). By sharing this link on the AUI Facebook page, data collection was quick-in-fact, the entire data collection period took no longer than one week in April, 2018. After having collected the data through surveymonkey.com, it was possible to export an SPSS file. SPSS is one of the best and most appropriate programs to run analysis with the acquired data. The data collected are anonymous and shall be kept on our computer hard drive for a period of three years, and then deleted. We will keep the data in any party, including AUI or any publishing outlet wishing to see the raw data for themselves. After collecting the data and closing the survey, SPSS was used to analyze the relationships between the independent and dependent variables and calculate both descriptive and inferential statistics.

**Data analysis**

The goal of this research is to determine the impact of price, food quality, service quality, and physical environment (independent variables) on customer satisfaction and brand loyalty (dependent variables). The questionnaire was divided up into 7 different sections: 1) Price (P), 2) Food Quality (FQ), 3) Service Quality (SQ), 4) Physical Environment (PE), 5) Customer Satisfaction (CS), 6) Brand Loyalty (BL), and demographics. The demographics (sex, age, marital status, frequency of visits and with whom they visit) were included to provide descriptive statistics of the sample.

**RESULTS**

Hypothesis 1: There is a positive relationship between price and customer satisfaction

Price has just one item in the questionnaire for operationalization: “The prices at McDonald’s Maroc are fair.” The prediction that price affects customer satisfaction at McDonald’s in Morocco was tested with the ANOVA. For this hypothesis, price was the independent variable and customer satisfaction was the dependent variable. Customer satisfaction was operationalized with three items: “I go to McDonald’s...,” “McDonald’s is better than other fast food restaurants in Morocco”, and “Overall, I am satisfied with McDonald’s.” A significant result obtained for price, \( F(4,172) = 4.685, p < 0.05 \). Means for price demonstrate that the difference was in the predicted direction.

Hypothesis 2: There is a positive relationship between price and brand loyalty.

The prediction that price affects brand loyalty at McDonald’s in Morocco was tested with the ANOVA. For this hypothesis, price was the independent variable and brand loyalty was the dependent variable. Brand loyalty (BL, dependent variable) was operationalized with three items: “McDonald’s Maroc has a good reputation”, “McDonald’s Maroc performs well as a fast food restaurant”, and “I am likely to recommend McDonald’s Maroc to friends and family.” A significant result obtained for price, \( F(4,172) = 3.351, p < 0.05 \). Means for price demonstrate that the difference was in the predicted direction.

Hypothesis 3: There is a positive relationship between food quality and customer satisfaction

Food quality (FQ, independent variable) was operationalized by three items within the survey: “McDonald’s food taste good,” McDonald’s food is served at the appropriate temperature,” and “McDonald’s Maroc food presentation is attractive.” The prediction that food quality would affect customer satisfaction at McDonald’s in Morocco was tested with the ANOVA. A significant result obtained for food quality, \( F(10,167 ) = 4.624, p < 0.05 \). Means for food quality demonstrate that the difference was in the predicted direction.

Hypothesis 4: There is a positive relationship between food quality and brand loyalty

The prediction that food quality affects brand loyalty at McDonald’s in Morocco was tested with the ANOVA. For this hypothesis, food quality was the independent variable and brand loyalty was the dependent variable. Food quality (FQ, independent variable) was
Hypothesis 5: There is a positive relationship between service quality and customer satisfaction

Service Quality (SQ, independent variable) was operationalized by three items within the survey: “McDonald’s Maroc employees know how to do their job,” “McDonald’s Maroc employees rarely make mistakes on my order,” and “McDonald’s Maroc meals are served quickly.” The prediction that service quality would affect customer satisfaction at McDonald’s in Morocco was tested with the ANOVA. A significant result did not obtain for service quality, $F(10,167) = .729$, $p > 0.05$. Means for service quality demonstrate that the difference was in the predicted direction.

Hypothesis 6: There is a positive relationship between service quality and brand loyalty

The prediction that service quality affects brand loyalty at McDonald’s in Morocco was tested with the ANOVA. A significant result was obtained for service quality, $F(10,167) = 1.915$, $p < 0.05$. Means for service quality demonstrate that the difference was in the predicted direction.

Hypothesis 7: There is a positive relationship between physical environment and customer satisfaction

Physical environment (PE, independent variable) was operationalized by three items within the survey: “McDonald’s Maroc restaurants are clean and well taken care of,” “McDonald’s Maroc restaurants have an appealing interior design,” and “McDonald’s Maroc restaurants are a comfortable place to eat in.” The prediction that physical environment would affect customer satisfaction at McDonald’s in Morocco was tested with the ANOVA. A significant result was obtained for physical environment, $F(10,165) = 3.059$, $p < 0.05$. Means for physical environment demonstrate that the difference was in the predicted direction.

Hypothesis 8: There is a positive relationship between physical environment and brand loyalty

The prediction that physical environment affects brand loyalty at McDonald’s in Morocco was tested with the ANOVA. For this hypothesis, physical environment was the independent variable and brand loyalty was the dependent variable. A significant result was obtained for physical environment, $F(12,165) = 4.066$, $p < 0.05$. Means for price demonstrate that the difference was in the predicted direction.

Hypothesis 9: Customers’ satisfaction is positively related to brand loyalty

The third research question asked whether there is a relationship between customers’ satisfaction and brand loyalty. Previous research on that relationship reviewed in this manuscript demonstrates there is a relationship between the two. To test the findings of previous research at McDonald’s Maroc, we put forth the hypothesis that customers’ satisfaction is positively related with brand loyalty. The ANOVA was used to test whether there was a significant relationship between the two. A significant relationship obtained, $F(12,165) = 6.64$, $p < 0.05$. Means for customer satisfaction and brand loyalty demonstrate that the difference was in the predicted direction.

DISCUSSION

Eight of the nine hypotheses received support, which means that the marketing mix (price, food quality, service quality, and physical environment) does indeed affect customer satisfaction and brand loyalty. The one exception was that hypothesis three, which asserted that service quality would impact customers’ satisfaction, did not receive support.

Given that eight of nine hypothesis tests obtained statistical significance, support for the arguments made in this manuscript was obtained. For example, price fairness at McDonald’s Maroc increases both customer satisfaction and brand loyalty. Food quality, such as taste, appropriate temperature and food presentation, is considered to be another significant attribute leading to enhanced customer satisfaction, as well as brand loyalty. In addition, the competence of the employees of McDonald’s Maroc, their ability to avoid mistakes and speed of delivery in the service quality also influence customer satisfaction and brand loyalty. As well, physical environment, operationalized by factors such as cleanliness, appealing interior design and comfort were important factors for both customer satisfaction and brand loyalty at McDonald’s Maroc. Finally, a significant relationship is obtained for the hypothesis that customer satisfaction is positively related with brand loyalty. Increases in customer satisfaction are positively correlated with brand loyalty.

The study’s results regarding drivers for customer satisfaction and brand loyalty may assist fast food
restaurants in Morocco including McDonald’s. Indeed, the study provides empirical evidence that may increase understanding of the driving factors for both customer satisfaction and brand loyalty in Arabic countries such as Morocco, as well as other fast food restaurants on the African continent and throughout the world. The results of the study are beneficial for both scholars and practitioners of marketing and business. Specifically, the following implications are seen from our investigation:

1. Price affects both customer satisfaction and brand loyalty at McDonald’s Maroc.
2. Food quality affects both customer satisfaction and brand loyalty at McDonald’s Maroc.
3. Service quality affects brand loyalty, but does not affect customer satisfaction at McDonald’s Maroc.
4. Physical environment affects both customer satisfaction and brand loyalty at McDonald’s Maroc.
5. Customer satisfaction and brand loyalty share an interdependent relationship; customer satisfaction affects brand loyalty and brand loyalty affects customer satisfaction at McDonald’s Maroc.

Conclusion

The purpose of the current investigation was to analyze the customer satisfaction and brand loyalty at McDonald’s Maroc, as well as examining the relationship between the two. Our investigation examined the effects of the marketing mix on customer satisfaction and brand loyalty at McDonald’s restaurants in Morocco and determined that the marketing mix does indeed influence customers’ satisfaction and brand loyalty. Additionally, we heeded to the call of Shamaha et al. (2018), who argued that because of the regional cultural differences in Africa, more investigation into the drivers of African fast food customer loyalty was needed. We have provided data that add to that body of literature and fill at least, in part, the gap in the literature regarding African fast food customers’ loyalty. Our findings indicate that the marketing mix plays a significant role in determining both customers’ satisfaction and loyalty; in this case McDonald’s Maroc.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Bailey R (2017). How has McDonald's been successful for so long. Available at: https://www.franchisedirect.com/information/markettrendsfactsaboutmcdonalds/5/1111/


First McDonald’s in Morocco, Arab World Opens in Morocco (1992). LA Times. Available at: http://articles.laimes.com/1992-12-20/local/me-4253_1_arab-world


Gunawanade PN (2015). Impact of brand equity towards purchasing desolution: a situation on mobile telecommunication services of Sri Lanka. Available at: http://repository.kln.ac.lk/handle/123456789/11630


Keegan M (2015). Under what conditions can a McDonald’s franchise agreement be terminated? Available at: https://smallbusiness.chron.com/under-conditions-can-mcdonalds-franchise-agreement-terminated-15926.html


Patel N (n.d.). Why understanding expectations is crucial for customer service. Available at: https://neilpatel.com/blog/expectations-and-customer-service/.


Tracy G (2004). The 7 Ps of marketing. Entrepreneur Middle East. Available at: https://www.entrepreneur.com/article/70824


Verdict (2017). Is Africa, and Nigeria, finally ready for McDonald’s? Available at: https://www.verdict.co.uk/mcdonalds-africa-nigeria/


Appendix

Questionnaire

McDonald's Maroc Survey

Thank you for your participation in this survey on McDonald’s Maroc!

We are only interested in your experiences at McDonald’s in Morocco. Please respond based only on your experiences at McDonald’s Maroc.

Your responses are confidential. There are 20 questions and it should take you no more than 5 minutes to complete.

1. The prices at McDonald's Maroc are fair.
   Strongly disagree 1 2 3 4 5 Strongly agree

2. McDonald’s Maroc food tastes good.
   Strongly disagree 1 2 3 4 5 Strongly agree

3. McDonald’s Maroc food is served at the appropriate temperature.
   Strongly disagree 1 2 3 4 5 Strongly agree

4. McDonald’s Maroc food presentation is attractive.
   Strongly disagree 1 2 3 4 5 Strongly agree

5. McDonald’s Maroc employees know how to do their job.
   Strongly disagree 1 2 3 4 5 Strongly agree

6. McDonald’s Maroc employees rarely make mistakes on my order.
   Strongly disagree 1 2 3 4 5 Strongly agree

7. McDonald’s Maroc meals are served quickly.
   Strongly disagree 1 2 3 4 5 Strongly agree

8. McDonald’s Maroc restaurants are clean and well taken care of.
   Strongly disagree 1 2 3 4 5 Strongly agree

9. McDonald’s Maroc restaurants have an appealing interior design.
   Strongly disagree 1 2 3 4 5 Strongly agree

10. McDonald’s Maroc restaurants are a comfortable place to eat in.
    Strongly disagree 1 2 3 4 5 Strongly agree

11. I go to McDonald’s Maroc…
    Rarely 1 2 3 4 5 Frequently

12. McDonald’s Maroc is better than other fast food restaurants in Morocco (e.g., Burger King, KFC).
    Strongly disagree 1 2 3 4 5 Strongly agree

13. Overall, I’m satisfied with McDonald’s Maroc.
    Strongly disagree 1 2 3 4 5 Strongly Agree

14. McDonald’s Maroc has a good reputation.
    Strongly disagree 1 2 3 4 5 Strongly agree

15. McDonald’s Maroc performs well as a fast food restaurant.
    Strongly disagree 1 2 3 4 5 Strongly agree

16. I am likely to recommend McDonald’s Maroc to friends and family.
17. The price, food quality, service quality, and physical environment at McDonald’s Maroc are consistently good.

Demographics

18. Gender.
   __ Male
   __ Female

19. Age.
   __ 15 to 25
   __ 26 to 35
   __ 36 to 45
   __ 46 to 55
   __ 55 and above

20. What is your living situation?
   __ Single
   __ Married
   __ Married with Children

21. With whom do you usually visit McDonald’s?
   __ Alone
   __ Spouse
   __ Boyfriend/Girlfriend
   __ Kids
   __ Friends