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Explaining actual purchase behaviour in quick-service restaurants: an approach integrating the theory of reasoned action and customers' service perceptions

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Abstract

Purpose – The aim of this study is to identify the factors that drive customers' actual purchase behaviour in a specific quick-service restaurant. To this end, a conceptual model is proposed that integrates constructs from the Theory of Reasoned Action (TRA) and the Service-Profit Chain.

Design/methodology/approach – A total of 430 surveys (with corresponding purchase receipts) were collected from customers of a franchised quick-service restaurant belonging to a renowned international brand. Data were analysed using partial least squares structural equation modelling.

Findings – The results reveal that four out of five analysed factors (attitude, behavioural intention, satisfaction, and attitudinal loyalty) had a positive influence on customers' actual purchase behaviour. However, no direct influence of perceived service quality was identified, although there is evidence of an indirect effect through satisfaction and attitudinal loyalty.

Practical implications – A comprehensive understanding of the factors that influence customers' actual purchase behaviour allows top and middle management teams to identify the areas of their marketing and operational strategies that require improvement. Results show that activities and protocols followed during the purchase interaction in a specific restaurant are just as crucial as customers' personal beliefs about quick-service restaurants in general.

Originality/value – The proposed model represents a pioneering attempt to gain a comprehensive understanding of what drives actual purchase behaviour in quick-service restaurants. To the best of our knowledge, this is the first study to provide evidence of the effects of satisfaction, service quality, and attitudinal loyalty on actual behaviour using real purchase-receipt data.

Keywords Quick-service restaurants, Purchase behaviour, Service quality, Satisfaction, Loyalty

Paper type Research article

1. Introduction

Quick-service restaurants (QSRs) form a highly competitive sector in which several well-known fast-food chains from around the world compete to attract and retain customers. The rapid global expansion of QSR chains is due in part to the widespread use of franchising

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and licensing (Cao and Kim, 2015), two growth mechanisms that require compliance with a specific set of operational quality standards and contractual terms. Indeed, restaurant managers recognise the standardisation of operations as a key factor of their success, while also stressing the importance of continuously collecting and analysing information about customer behaviour (DiPietro *et al.*, 2007). Furthermore, intense competition between QSR chains to deliver the best dining experience poses major challenges for restaurant operators (Richardson *et al.*, 2019), and highlights the need to build strong, long-term customer relationships (Swimberghe and Wooldridge, 2014). It is therefore critical for QSR top and middle management teams to fully understand the factors that influence customer behaviour, particularly at the service counter, which is where the main interactions with customers take place.

Within the restaurant industry, the QSR sector stands out for attributes such as low prices, convenience, standardised operations and service protocols, simple menus, limited table service and, perhaps most importantly, speed of service (Massimino and Lawrence, 2019). The sector is also frequently criticised for the supposedly poor nutritional quality of the food it sells (Harrington *et al.*, 2017; Farah and Shahzad, 2020), especially given rising consumer awareness of health issues (Gallarza-Granizo *et al.*, 2020). However, although customers perceive that QSR food is not particularly nutritious, they do consider that this type of restaurant offers good value for money (Slack *et al.*, 2021). Hence, it seems necessary to look in greater depth at the factors that shape the behaviour of fast-food restaurant customers to gain a better understanding of the specific aspects that drive their purchasing decisions.

Previous research has analysed general customer behaviour based on two main theoretical approaches. First, the Service-Profit Chain perspective has been used to link customers' perceptions of service quality with firms' profitability (Frennea *et al.*, 2014). Second, the Theory of Reasoned Action (TRA) has been used to study and predict both customers' behavioural intentions and their actual behaviour (e.g. Mason *et al.*, 2016; Ryu and Han, 2010). In the QSR context in particular, previous studies have analysed behavioural intention and its relationships with factors such as service quality, perceived value, customer satisfaction and loyalty (e.g. Namin, 2017; Nguyen *et al.*, 2018; Gallarza-Granizo *et al.*, 2020; Slack *et al.*, 2021).

Despite this extensive literature on consumer behaviour in QSRs, research gaps remain regarding decision-making in foodservice (DiPietro, 2017). In particular, most extant studies have focused exclusively on behavioural intention rather than connecting it with actual purchase behaviour (APB). Since the former does not always translate into the latter, it is crucial to differentiate between these behaviours to understand what really drives customers' purchasing decisions (Chih *et al.*, 2015). Another potential limitation of numerous preceding studies has been social desirability bias and memory errors, which are inherent risks when relying exclusively on surveys to measure a construct such as APB (Loureiro and Rahmani, 2016).

Likewise, due to confidentiality and competition concerns, fast-food restaurant franchises tend not to disclose information on their average transaction values or sales per business unit or category, and are even more reluctant to share data on individual receipts or purchase frequency (Fernandes *et al.*, 2021). Given the complexity of gathering authentic data to assess customers' APB, most scholars have resorted to surveys based on customers' previous experiences (Yang and Lee, 2017). Only a limited number of articles have employed real sales data to capture customers' actual behaviour, and even fewer have done so in the QSR context. The present study addresses this research gap by following Lai *et al.* (2018), who suggest that customer behaviour models in hospitality should be based on robust theoretical frameworks, and Mendocilla *et al.* (2026), who posited the need to analyse the impact of service quality in the QSR context on actual behaviour, rather than only on intentions. Consequently, it seeks to expand the understanding of the drivers of customers' APB in QSRs by integrating the TRA and Service-Profit Chain perspectives into a single conceptual model. The TRA is employed to examine the influences of attitude and behavioural intention towards QSRs in general and it is

particularly well-suited for analysing impulse buying behaviour in tourist-heavy locations characterised by high pedestrian traffic (Coskun and Norman, 2021; Meng and Xu, 2012; Ryu and Han, 2010). In turn, the service perception component of the Service-Profit Chain captures customers' perceptions of service quality, satisfaction, and attitudinal loyalty in a particular QSR.

Based on a comprehensive dataset that includes purchase receipts and surveys collected from 430 customers at a franchise of a well-known international QSR chain that is strategically located in the most touristic area of Barcelona (Spain), this research contributes to the extant literature by building an all-encompassing model that reveals both the extent to which the evaluated factors influence customers' APB and how these factors relate to marketing strategies and operations management. To the best of our knowledge, this is only the second study to focus on the specific topic of real consumer behaviour in fast-food restaurants (the other being Dunn *et al.*, 2011) and is the first attempt to integrate two different theoretical frameworks to explain the APB construct. In addition, the study is pioneering in its use of authentic sales data derived from purchase receipts to assess customers' APB in the QSR context, a methodology that has rarely been used before.

2. Theoretical framework

Figure 1 presents the proposed conceptual model, which integrates both theoretical approaches. As illustrated on the left-hand side of the figure, the Theory of Reasoned Action (TRA) provides a well-established and widely used framework for analysing how customers' attitudes, subjective norms and behavioural intentions towards the QSR business model influence their APB in a specific restaurant (Fishbein and Ajzen, 1975). This theory facilitates the systematic examination of how consumers' prior beliefs regarding benefits, costs, and social expectations shape their intentions to engage in specific behaviours, which is particularly useful for studying customers' actual behaviour in fast-food establishments. In turn, on the right-hand side of the figure, the service perception component of the Service-Profit Chain (Heskett *et al.*, 1994) provides a concise framework for capturing customers' perceptions of aspects such as satisfaction and service quality during a specific service encounter, as well as the attitudinal loyalty exhibited to a particular QSR brand. This last approach emphasises the role of customers' perceived service experience in driving satisfaction, attitudinal loyalty, and APB at a particular restaurant, considering service performance, staff behaviour, the restaurant environment, and product consistency.

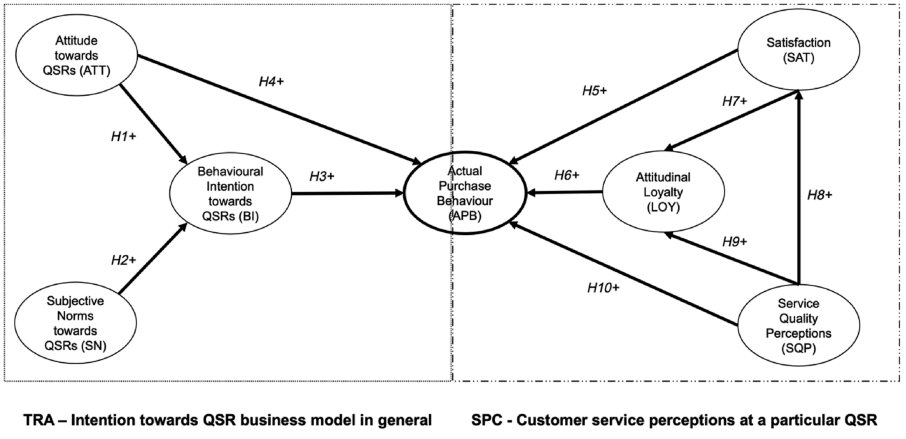

Figure 1. Proposed conceptual model. Source: Authors' own work

In summary, the elements of both theoretical frameworks converge on actual behaviour, acting as key drivers of customers' APB. The proposed framework encompasses both the internal factors that shape customers motivation to patronise QSR establishments, and the external factors associated with a specific service encounter and a particular QSR brand. By integrating the TRA with the service component of the Service-Profit Chain, the model links customers' intentions towards fast-food restaurants to specific and measurable perceptions of a service encounter.

2.1 Theory of reasoned action (TRA)

The TRA posits that an individual's real behaviour is preceded by a behavioural intention, which depends on two key factors, namely attitude and subjective norms (Fishbein and Ajzen, 1975). The predictive power of the TRA model is well-established (Ryu and Han, 2010; Kim *et al*., 2011) and it has been used to analyse a wide range of intentions and behaviours in the fields of marketing and psychology. It has been applied to sectors such as retail and finance, and even to forecast green consumption in different countries (e.g. Paul *et al.*, 2016), so it is a natural choice for analysing customer behaviour in the foodservice industry (e.g. Bagozzi *et al.*, 2000; Ryu and Han, 2010; Mason *et al*., 2016; Slack *et al*., 2021).

The QSR business model occupies a unique position in consumers' minds, attracting both loyal supporters and active critics. In this study, the TRA is employed to evaluate how customers' individual and normative beliefs about the QSR business model affect their intention to consume in this type of restaurant, and ultimately their actual behaviour in a specific QSR.

2.1.1 Attitude and subjective norms. The TRA defines attitude as the degree to which the weight of positive or negative evaluations shape an individual's particular behaviour (Fishbein and Ajzen, 1975). Since attitude is a predisposition that can be favourable or unfavourable toward certain objects or situations, in the context of our study, it denotes an individual's predisposition to eat at QSRs. By contrast, subjective norms relate to opinions that others (such as friends, co-workers, relatives, experts or respected individuals) have formed about what one should do in a given situation, and the consequent motivation to comply with those expectations (Ryu and Han, 2010). The influence of subjective norms thus captures the social pressure to perform a certain action or not (Paul *et al*., 2016), which in this study means eating at QSRs. Accordingly, the first two hypotheses are:

H1. Customers' attitudes towards QSRs positively influence their behavioural intentions towards QSRs.

H2. Customers' subjective norms regarding QSRs positively influence their behavioural intentions towards QSRs.

2.1.2 Behavioural intention and actual purchase behaviour. When examining customer behaviour, most research mainly focuses on behavioural intentions rather than on actual behaviour (Chih *et al.*, 2015). This assertion is further substantiated by the extant foodservice literature, since the role of behavioural intention has been the primary focus of research in different restaurant contexts (e.g. Ryu *et al.*, 2012; Namin, 2017; Slack *et al.*, 2021). As Ryu and Han (2010) have posited, behavioural intention is closely connected to subsequent actual behaviour because it precedes future actions and can predict most human behaviours (Ajzen and Fishbein, 1980). However, this relationship has often been neglected by scholarship due to the challenges and costs associated with gathering data on actual purchase behaviour (Cronin *et al*., 2000), including purchase frequency, amount spent, and/or quantity of purchased products (De Cannière *et al*., 2009). By contrast, behavioural intention is more easily measured through prospective survey-based questions.

Customers' individual and normative beliefs about the QSR business model shape their attitudes towards QSRs in general, including their perceptions about the attributes or consequences of adopting a certain behaviour (Ajzen and Fishbein, 1980), and consequently

their intention to consume in this type of restaurant (Dunn *et al.*, 2011). Consequently, if customers hold negative views of certain QSR characteristics (such as greasy, unhealthy food, or lack of table service), they will be less likely to frequent such establishments or spend money in them. However, despite these unfavourable perceptions of fast-food restaurants, people continue to use them because, according to previous literature, they appreciate the convenience, the taste of the food and the low prices (Slack *et al.*, 2021; Harrington *et al.*, 2017). Moreover, modern lifestyles make the total avoidance of fast-food consumption very difficult indeed (Farah and Shahzad, 2020). The present study therefore posits that favourable beliefs about QSRs in general positively influence customers' intention to purchase at these restaurants, and most importantly, that these intentions ultimately lead to actual behaviour at a particular QSR. Indeed, Dunn *et al.* (2011) found a significant positive relationship between intention and behaviour when measuring fast-food consumption retrospectively. The following hypothesis is thus proposed:

H3. Customers' behavioural intentions towards QSRs in general positively influence their actual purchase behaviour in a particular QSR.

Attitude, expressed as a positive or negative predisposition towards particular products or services, determines customers' preferences (Park *et al.*, 2011) and is widely considered the most important determinant of actual behaviour (Kim *et al.*, 2011). Since the decision to eat in QSRs is directly related to customers' attitudes towards them (Mason *et al.*, 2016), attitude is also expected to positively affect customers' purchase behaviour in this context, as previous studies have found in other settings (e.g. Park *et al.*, 2011). Moreover, to confirm that attitude serves as a strong predictor of actual behaviour, the time elapsed between the measurement of attitude and the time when the behaviour occurs should be short (Ajzen and Fishbein, 1977), as is the case in this study. Accordingly, it is proposed that:

H4. Customers' attitudes towards QSRs in general positively influence their actual purchase behaviour in a particular QSR.

2.2 Service perception component and customers' actual purchase behaviour

The Service-Profit Chain is a broad conceptual framework that integrates the complex interrelationships between operational processes, assessments of employee and customer perceptions and behaviour, and firm profitability (Kamakura *et al.*, 2002). This conceptual approach posits that firms can control their customers' perceptions and behaviours, which directly translate into financial outcomes (Frennea *et al.*, 2014). Our framework isolates a specific component of that model called "service perception" that encompasses customers' assessments of concepts such as satisfaction, loyalty, and service quality (Yee *et al.*, 2009).

While several studies have examined perceived service quality and satisfaction on the basis of consumers' past experiences in general, our study employs the Service-Profit Chain to capture the effects of a specific service interaction, while also exploring how attitudinal loyalty influences their actual behaviour in a specific franchised QSR.

2.2.1 The influence of customer satisfaction and attitudinal loyalty on actual purchase behaviour. According to Oliver (1981), one key stage of the purchasing process when customers potentially experience satisfaction is the moment of the transaction itself. This satisfaction reflects the customer's overall evaluation of the attributes of a particular product or service (Yang and Lee, 2017), and is their emotional response to a positive assessment of service quality during the purchase encounter (Yee *et al.*, 2009; Oliver, 1999). Indeed, a high percentage of QSR customers report immediate satisfaction during the service encounter associated with the taste of the food (Dunn *et al.*, 2008). It is critical to understand satisfaction at this precise moment, since frontline staff can also emotionally influence the customer's experience, and therefore their actual purchase behaviour (Yang and Lee, 2017). This functions in both a positive and a negative sense, since any issues with the service delivered

during the purchase transaction, for instance due to improper front-line staff behaviour, will also impact the customer's emotions and perceptions at that crucial moment.

Although the relationship between satisfaction at the moment of purchase and customers' APB has yet to be studied in the context of QSRs, it has been explored in others. For example, Bruwer (2014) identified a strong relationship between satisfaction and purchase behaviour among visitors to a wine festival. Similarly, Kumar *et al.* (2014) found that satisfaction had a strong and positive effect on purchase frequency in the service sector when the state of the economy was better. Based on this previous evidence, we propose the following:

H5. Customers' satisfaction with a particular QSR positively influences their actual purchase behaviour at that QSR.

Oliver (1999, p. 34) defines loyalty as "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future." Loyalty can be approached from two perspectives: behavioural loyalty, which is mainly characterised by the frequency of repeat purchasing; and attitudinal loyalty, which reflects future intentions to purchase, recommend, and spread positive opinions. Attitudinal loyalty is commonly measured through word-of-mouth and intention to repurchase or revisit (Nam *et al.*, 2011; Ong *et al.*, 2018). Building on this premise, and given that such a relationship has yet to be empirically validated, the present study hypothesises as follows:

H6. Customers' attitudinal loyalty towards a particular QSR brand positively influences their actual purchase behaviour at a QSR of that brand.

Since satisfaction is a mental state that arises after consuming a product or service, and is one that typically drives loyalty (Chang, 2013; Ryu and Han, 2011), this relationship has been widely studied in the QSR context. Qin and Prybutok (2008), Bujisic *et al.* (2014), Richardson *et al.* (2019) and Slack *et al.* (2021) all found a direct, positive effect of satisfaction on intentions to eat at a certain fast-food restaurant again, to speak positively about it, and to recommend it to other people. Therefore, the following hypothesis was proposed:

H7. Customers' satisfaction with a particular QSR positively influences their attitudinal loyalty towards that QSR brand.

2.2.2 The role of service quality perceptions on satisfaction, attitudinal loyalty, and actual purchase behaviour. In the QSR context, several key elements should be considered when assessing service quality: food quality, given its significant influence on customer satisfaction and future behavioural intentions (Richardson *et al.*, 2019); personnel, who interact with customers at the service encounter and are of pivotal importance in the development of long-term relationships (Swimberghe and Wooldridge, 2014); the physical environment, which encompasses such elements as decoration, layout, and ambient conditions (Han and Ryu, 2009); and operational performance, which is especially important because operations vary depending on the type of restaurant (DiPietro, 2017). A considerable number of QSRs operate as franchised units and, in order to provide a fast, high-quality service, these units must replicate operational knowledge and organisational routines (Hua and Dalbor, 2013).

The relationship between perceived service quality and customers' attitudinal and behavioural responses has been widely explored (e.g. Lai, 2015; Namin, 2017; Nguyen *et al.*, 2018; Richardson *et al.*, 2019; Ghosh *et al.*, 2023). For example, Namkung and Jang (2008) found that three facets of service quality (food, physical environment, and service) influence customer satisfaction. Specifically in the QSR sector, Nguyen *et al.* (2018) analysed the relationships between the five quality dimensions of the SERVQUAL scale and customer satisfaction, finding that they were all positive and significant, especially regarding tangible aspects. Similarly, Namin (2017) used the SERVPERF instrument to identify a modest effect of service quality on satisfaction, but a strong influence of food quality alone. Those findings align with Richardson *et al.* (2019), who also identified statistically significant effects of both service and food quality on satisfaction, demonstrating that they are critical factors for

accomplishing customer satisfaction. More recently, Ghosh *et al.* (2023) also used the QUICKSERV scale to find a strong influence of service quality on customer satisfaction. Therefore, we propose the following hypothesis:

H8. Customers' perceptions of service quality at a particular QSR positively influence their satisfaction with that QSR.

Previous research has also found evidence of a strong influence of service quality on customers' future intentions, such as repurchasing or recommending, which are both indicators of attitudinal loyalty. In the restaurant sector, findings by Qin and Prybutok (2008), Ha and Jang (2010) and Richardson *et al.* (2019) all suggest that service and food quality have a positive impact on intentions to return, speak positively, and make recommendations. In light of these findings, the following hypothesis is proposed:

H9. Customers' perceptions of service quality at a particular QSR positively influence their attitudinal loyalty towards that QSR brand.

Finally, QSRs have to meet, and ideally exceed, customers' expectations in terms of providing a fast service, which is one of the top five most valued attributes among QSR customers (Harrington *et al.*, 2012) and a major driver of their satisfaction and repurchase intentions (Massimino and Lawrence, 2019). Operations and service protocols around the service encounter therefore play a key role. Front-line staff behaviour and restaurant layout also contribute to the delivery of a quick, pleasant, and positive customer experience (Swimberghe and Wooldridge, 2014; Han and Ryu, 2009) and hence to purchasing behaviour too. This study argues that when customers perceive a dynamic service, clear signage, short queues, and a friendly environment, which are all signs of service quality, they will feel more satisfied and more likely to place larger orders. Therefore, since perceptions of service quality reflect a restaurant's operational performance, we can propose the following hypothesis:

H10. Customers' perceptions of service quality at a particular QSR positively influence their actual purchase behaviour at that QSR.

3. Methodology

3.1 Data collection

Data was collected from customers of a franchised restaurant belonging to an international QSR chain ranked among the world's top ten and operating in major tourist cities all around the planet. The chosen restaurant has the highest turnover of its chain in Spain and is located in "Las Ramblas", Barcelona, a tourist area that receives more than 78 million visitors per year (Castán, 2016). With the permission of the owners and manager, the survey was conducted inside the restaurant itself, and respondents were selected by convenience sampling, based on their willingness to participate. The participants were informed that the survey was anonymous, that no personal identification was required, and that the data would be used for academic purposes only.

An initial pre-test was conducted face-to-face with 40 customers of the selected QSR to check their understanding of the 34 items on the survey questionnaire. Afterwards, a few minor modifications were made to the wording of some items. The pre-test also served to verify that the questionnaire required less than six minutes to complete; a significant finding considering the limited time that customers typically spend in this type of restaurant. Thereafter, over a period of 21 days, from Monday to Sunday and at different times of day, face-to-face questionnaires were administered immediately after the service interaction. Field researchers approached customers at the service counter after they had received their orders and invited them to participate in the survey on a voluntary and anonymous basis. If they agreed, they were asked whether the QSR staff could provide the researchers with a copy of their order receipt to assess their actual purchase behaviour (quantity of products and money spent). In the event of

customers consenting, a field researcher accompanied them to their seats to administer the questionnaire. Following this process, a total of 430 valid responses were obtained, a number that is fully consistent with the recommended threshold for Partial Least Squares Structural Equation Modelling of between 200 and 400 cases (Vinzi *et al.*, 2011).

3.2 Survey instrument and measures

As shown in Table 1, all but one of the constructs were rated on a 7-point Likert scale. The sole exception, Attitude, was measured using a 7-point semantic differential scale containing six pairs of adjectives. To measure Attitude (ATT), Subjective Norms (SN) and Behavioural Intention (BI), items were adapted from Dunn *et al*. (2011). Service quality perceptions (SQP)

Table 1. Measurement scales

Construct	Label	Items
Attitude	AT1	Harmful – Beneficial
	AT2	Inconvenient – Convenient
	AT3	Unpleasant – Pleasant
	AT4	Unhappy – Happy
	AT5	Guilty – Carefree
	AT6	Lethargic – Energetic
Subjective norms	SN1	People who are important to me think that I should eat at quick-service restaurants regularly
	SN2	People close to me expect me to eat at quick-service restaurants regularly
	SN3	People in my life whose opinions I value eat at quick-service restaurants regularly
	SN4	People close to me eat at quick-service restaurants regularly
Behavioural intention	BI1	Given my lifestyle it is likely that I will eat at quick-service restaurants regularly
	BI2	I tend to eat at quick-service restaurants regularly
Service quality perceptions	PEP1	Attractive place and pleasant atmosphere
	PEP2	Well-painted walls and proper lighting
	PEP3	Attractive exterior signs and appearance
	PEP4	Comfortable indoor temperature
	OPP1	Proper service time (order preparation)
	OPP2	Enough staff to attend to consumers
	OPP3	Experienced and well-trained employees
	PSP1	Staff have a pleasant attitude
	PSP2	Staff have a clean and well-groomed look
	PSP3	Staff are dynamic and friendly
	FQP1	Fresh and properly cooked food
	FQP2	Delicious and tasty food
	FQP3	Sufficient variety of choices on the menu
	FQP4	Practical and hygienic food packaging
Overall service quality	OSQ	I perceived an excellent overall quality of service
Satisfaction	SAT1	I am very satisfied with my experience at this restaurant
	SAT2	This restaurant puts me in a good mood
	SAT3	I really enjoy myself at this restaurant
Attitudinal loyalty	LOY1	I would revisit restaurants of this QSR brand in the future
	LOY2	I would recommend this QSR restaurant brand to my friends or others
	LOY3	I would spread positive things about this QSR restaurant brand
Actual purchase behaviour	APB1	If I were near this restaurant tomorrow, I would go in again (proxy of frequency)
	APB2	Quantity of products purchased per person (data collected from the purchase receipt)
	APB3	Amount spent per person (data collected from the purchase receipt)

Source(s): Authors' own work

were measured using the QUICKSERV scale (Mendocilla *et al.*, 2021), a second-order construct comprising 14 items across four factors: food quality perception (FQP), operations performance perception (OPP), personnel service perception (PSP), and physical environment perception (PEP). An additional item was used to measure overall service quality, following Mendocilla *et al.* (2021). Satisfaction (SAT) was captured through three items based on Ryu *et al.* (2012), and attitudinal loyalty (LOY) was measured using three items based on Ong *et al.* (2018) and Ryu *et al.* (2012).

Finally, three main criteria -which have frequently been utilised separately or in conjunction in previous studies-were considered to assess customers' APB: actual purchase frequency, quantity of purchased products, and amount of money spent (e.g. De Cannière *et al.*, 2009; Millan and Wright, 2018). As purchase frequency in relation to retail companies is notably difficult to determine without customer registration and subsequent follow-up, the present study introduced a proxy measure in the form of a question about customers' willingness to return to the same restaurant. The other two APB indicators could be measured by directly referring to the customers' purchase receipts, namely the number of items purchased, and the amount of money spent. This original and highly effective method for capturing information distinguishes our study from most previous research that has primarily relied on self-reported retrospective questionnaires (e.g. Chih *et al.*, 2015). The numeric data obtained from the receipts was then converted to a 7-point scale to ensure consistency with the proxy used for the purchase frequency item.

3.3 Data analysis

Data was analysed using IBM SPSS Statistics version 26.0 and SmartPLS 3.0 (Ringle *et al.*, 2015). The partial least squares structural equation modelling (PLS-SEM) technique has been demonstrated to be a suitable method for evaluating models that include both formative and reflective variables, as well as the relationships among dependent variables from a large set of independent constructs (Hair *et al.*, 2019a, b). Furthermore, PLS-SEM is recommended when testing complex models that extend existing theoretical frameworks, as is the case with this study. It also usually achieves high levels of statistical power with minimal sample sizes, and has been validated for use with higher-order constructs (Hair *et al.*, 2017). Additionally, in this study, PLS-SEM was employed to conduct a multigroup analysis (MGA) based on generational cohorts.

3.4 Sample characteristics

Table 2 shows the descriptive statistics of the sample. Two thirds of the respondents were millennials (Generation Y), and there were slightly more females than males. Almost a quarter of respondents were Spaniards, while the remainder were tourists of different nationalities. More than 90% of receipts were for purchases below €15. The average amount spent by respondents was €8.11, with females spending slightly more than males.

4. Results

4.1 Descriptive analysis

The distribution of the sample according to generational cohorts was achieved by classifying the respondents based on their age and the year in which the surveys were conducted. As illustrated in Table 3, most surveyed customers belonged to Generation Y, and the composition of the sample was not uniform across the four generational cohorts. Nevertheless, several descriptive patterns can be observed. In relation to the elements that comprise actual purchase behaviour, Generation Z reported the highest restaurant consumption frequency, with an average value of 5 out of 7. In contrast, at least 50% of Generation X respondents spent €7.90 or more and purchased at least three products, exhibiting the highest consumption levels overall. With regard to the other variables, Generation X reported the highest level of

Table 2. Demographic profile of sample ($N = 430$)

Demographic characteristic	Option	Frequency	Percentage
Gender	Female	229	53.3
	Male	201	46.7
Origin	Spaniards	104	24.2
	Foreigners	326	75.8
Age	≤22 (Generation Z) *	89	20.7
	23–38 (Generation Y) *	221	51.4
	39–54 (Generation X) *	84	19.5
	≥55 (Baby boomers) *	36	8.4
Amount spending	≤ €5.00	123	28.6
	€5.01 - €10.00	182	42.3
	€10.01 - €15.00	87	20.2
	€15.01€ - €20.00	27	6.3
	> €20.00	11	2.6

Note(s): *The classification into generational cohorts was based on the reported age and the year of data collection

Source(s): Authors' own work

attitudinal loyalty to the QSR chain under study; Generation Z displayed the highest level of perceived service quality, and Baby Boomers reported the highest level of satisfaction. In comparison to the previous three variables, all generations reported lower levels of behavioural intentions, positive attitudes and subjective norms towards the QSR business model, suggesting that customers across generations maintain a degree of reservation or criticism toward this type of restaurant. However, it is noteworthy that Baby Boomers exhibited the highest scores for both attitude and subjective norms, while Generation X displayed the highest behavioural intention. A multigroup analysis based on generational cohorts further explores these differences in a later section of this paper.

4.2 Measurement model assessment

The proposed conceptual model comprises seven constructs. Two of these were modelled as mode-B (formative) constructs (ATT and APB), while the other five were mode-A (reflective) constructs (SN, BI, SAT, LOY and SQP). It should also be noted that SQP is a second-order construct. Following the guidelines of Hair *et al*. (2017), internal consistency and convergent and discriminant validity were calculated for the reflective constructs. Formative constructs were evaluated for collinearity and outer weights.

Table 4 shows the outer loadings, average variance extracted (AVE), composite reliability (CR), and Cronbach's α for the reflective constructs, which were used to evaluate internal consistency and convergent validity. CR values of all constructs ranged from 0.901 to 0.963, exceeding the recommended threshold of 0.70 (Hair *et al*., 2019b), and Cronbach's α values ranged from 0.826 to 0.943, also comfortably surpassing the recommended cut-off point of 0.70. All outer loadings were also greater than 0.70 (Hair *et al*., 2017) and AVE values were above the 0.50 threshold (Hair *et al*., 2017), thus supporting convergent validity.

Discriminant validity was established using both the Fornell–Larcker criterion and heterotrait–monotrait (HTMT) ratio. AVE values of every reflective construct exceeded the highest square of the estimated correlations among the associated constructs (Hair *et al*., 2017) and all HTMT values were below the threshold of 0.85 (Henseler *et al*., 2015), as shown in Table 5.

Regarding formative constructs (see Table 4), the variance inflation factor (VIF) was evaluated, and all values for APB and Attitude were found to be below 3.0 (Hair *et al*., 2019a),

Table 3. Descriptive analysis according to generational cohorts

Cohort	*N*	Statistic	ATT	SN	BI	SAT	SQP	LOY	Frequency (proxy)	Amount spent	Purchased products
≤22 (GEN Z)*	89	Mean	4.38	2.65	3.22	5.29	5.95	5.72	4.60	7.58	3.27
		Median	*4.33*	*2.25*	*3.00*	*5.33*	*6.33*	*5.83*	*5.00*	*6.75*	*2.00*
20–38 (GEN Y)*	221	Mean	4.25	2.68	3.31	5.23	5.76	5.63	4.36	8.35	3.67
		Median	*4.17*	*2.50*	*3.00*	*5.33*	*6.00*	*5.75*	*4.00*	*7.20*	*3.00*
39–54 (GEN X)*	84	Mean	4.65	2.96	3.43	5.35	5.64	5.72	4.61	8.51	3.75
		Median	*4.50*	*2.88*	*3.50*	*5.33*	*6.00*	*5.96*	*5.00*	*7.90*	*3.00*
≥55 (Baby boomers)*	36	Mean	4.76	3.03	3.15	5.39	5.81	5.78	4.42	7.03	2.69
		Median	*4.67*	*3.00*	*2.75*	*5.67*	*6.00*	*5.86*	*4.00*	*5.95*	*2.00*
Total	430	Mean	4.40	2.76	3.31	5.28	5.68	5.78	4.46	8.11	3.52
		Median	*4.33*	*2.50*	*3.00*	*5.33*	*5.83*	*6.00*	*5.00*	*7.05*	*3.00*

Note(s): *The classification into generational cohorts was based on the reported age and the year of data collection
Source(s): Authors' own work

Table 4. Assessment of measurement model

Constructs and items	Outer loadings	Outer weights	*p*-value	VIF	AVE	CR	Cronbach's alpha
Attitude							
ATT1		0.231	0.025	1.497			
ATT2		0.428	0.000	1.229			
ATT3		0.238	0.017	1.563			
ATT4		0.191	0.056	1.602			
ATT5		0.168	0.067	1.400			
ATT6		0.257	0.010	1.461			
Subjective norms					0.695	0.901	0.853
SN1	0.814						
SN2	0.820						
SN3	0.869						
SN4	0.829						
Behavioural intention					0.851	0.920	0.826
BI1	0.918						
BI2	0.927						
Service quality perceptions (2° order construct)					0.727	0.914	0.875
FQP	0.855		0.000				
OPP	0.864		0.000				
PEP	0.809		0.000				
PSP	0.880		0.000				
Satisfaction					0.794	0.920	0.871
SAT1	0.871						
SAT2	0.889						
SAT3	0.914						
Attitudinal loyalty					0.897	0.963	0.943
LOY1	0.947						
LOY2	0.964						
LOY3	0.930						
Actual purchase behaviour							
APB1		0.976	0.000	1.012			
APB2		−0.161	0.067	2.091			
APB3		0.266	0.017	2.083			

Source(s): Authors' own work

Table 5. Heterotrait–monotrait ratio/Fornell–Larcker criterion

	BI	LOY	SAT	SQP	SN
BI	*0.851*	0.083	0.069	0.047	0.469
LOY	0.326*	*0.897*	0.324	0.471	0.076
SAT	0.306*	0.624*	*0.794*	0.388	0.076
SQP	0.254*	0.751*	0.709*	*0.727*	0.058
SN	0.812*	0.303*	0.319*	0.272*	*0.695*

Note(s): *HTMT values should be below 0.85 to establish discriminant validity
Figures in the diagonal present the AVE values. Figures above the diagonal correspond to the constructs' squared correlations

Source(s): Authors' own work

thus ruling out collinearity issues. Likewise, most outer weights were statistically significant, and in the two cases where they were not, the outer loadings were significant. Therefore, all formative constructs were retained, and we proceeded by evaluating the structural model.

4.3 Structural model analysis

First, it was identified that the VIF values for all predictor variables were below 3.0 (ATT = 1.315, BI = 1.262, SAT = 1.803, LOY = 2.084 and SQP = 2.239), confirming the absence of collinearity issues. Concerning path coefficients (β-values), Table 6 shows that nine of the ten were statistically significant. Additionally, R^2 values of all endogenous constructs exceeded the 0.20 threshold recommended by Hair *et al.* (2017) for the consumer behaviour field. The R^2 for APB was 0.299, while the R^2 for the other three endogenous constructs were even higher, so the explanatory power and accuracy of the proposed model can be considered adequate. Predictive accuracy was further confirmed by a Stone–Geisser test, with all Q^2 values greater than zero, as recommended by Hair *et al.* (2019a).

4.4 Hypotheses testing

As shown in Table 6 and Figure 2, the results support the applicability of TRA to explain customers' APB in the QSR context, as Hypotheses 1 and 2 were confirmed. Focusing on the influences of customer attitude and behavioural intention on APB, the results suggest positive and significant relationships, supporting Hypotheses 3 and 4. Hypotheses 5 and 7 were also

Table 6. Results of structural model and hypothesis testing results

Hypothesis	Structural relationships	Path coefficient	*t*-value	*p*-value	Result
H1	ATT → BI	0.161	3.703	0.000	Supported
H2	SN → BI	0.617	16.224	0.000	Supported
H3	BI → APB	0.179	3.648	0.000	Supported
H4	ATT → APB	0.114	2.146	0.016	Supported
H5	SAT → APB	0.269	4.402	0.000	Supported
H6	LOY → APB	0.223	3.570	0.000	Supported
H7	SAT → LOY	0.229	4.416	0.000	Supported
H8	SQP → SAT	0.624	18.775	0.000	Supported
H9	SQP → LOY	0.544	11.768	0.000	Supported
H10	SQP → APB	−0.051	0.687	0.247	No supported
Total indirect effects on APB					
ATT → APB		0.029	2.429	0.008	
SN → APB		0.110	3.581	0.000	
SAT → APB		0.051	2.758	0.003	
SQP → APB		*0.321*	5.406	0.000	
Coefficients of determination (R^2) & predictive relevance (Q^2)					
R^2 (APB) = 0.299		$R^{2\ \text{adjusted}}$ (APB) = 0.291		Q^2 (APB) = 0.170	
R^2 (BI) = 0.490		$R^{2\ \text{adjusted}}$ (BI) = 0.488		Q^2 (BI) = 0.480	
R^2 (LOY) = 0.504		$R^{2\ \text{adjusted}}$ (LOY) = 0.502		Q^2 (LOY) = 0.47	
R^2 (SAT) = 0.389		$R^{2\ \text{adjusted}}$ (SAT) = 0.388		Q^2 (SAT) = 0.386	

Note(s): APB: Actual Purchase Behaviour, ATT: Attitude, BI: Behavioural Intention, LOY: Attitudinal loyalty, SAT: Satisfaction, SN: Subjective Norms, SQP: Service Quality Perceptions

Source(s): Authors' own work

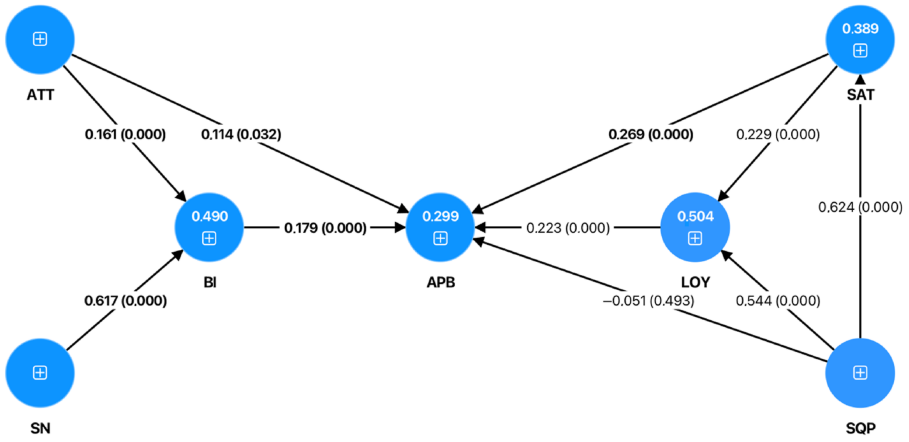

Figure 2. Bootstrapping and path coefficients. Source: Authors' own work

accepted, since satisfaction is indeed a powerful driver of APB and helps to build loyalty. Similarly, Hypothesis 6 on the positive influence of attitudinal loyalty on APB is confirmed, as are Hypotheses 8 and 9 on the influence of SQP on satisfaction and attitudinal loyalty. Only Hypothesis 10 was rejected since no significant positive influence of service quality perceptions on APB was found. However, as shown in Table 6, there is a significant indirect influence in this regard via satisfaction and attitudinal loyalty.

4.5 Multigroup analysis

A multigroup analysis (MGA) was conducted on the basis of three of the four generational cohorts identified in the sample (Gen Z, Gen Y, Gen X). Generations Z and X were represented comparatively equally, while Generation Y was substantially larger and the Baby Boomer group was excluded from the MGA due to its very small sample size. Following Henseler *et al.* (2016), for the Measurement Invariance of Composite Models (MICOM) procedure, significant differences were only found when comparing between Generations Y and X. A permutation-based MGA revealed that all constructs complied with the invariance reported at Step 2 of the MICOM process (see Table 7). The SmartPLS permutation procedure yielded the observation that subjective norms exerted a stronger effect on behavioural intention among

Table 7. MICOM step 2 results for generational cohorts Y and X

Construct	Original correlation	Correlation permutation means	5.0%	Permutation *p* value
APB	0.972	0.961	0.891	0.46
ATT	0.888	0.821	0.627	0.705
BI	0.998	0.999	0.998	0.064
LOY	1	1	1	0.27
SAT	1	0.999	0.998	0.842
SN	0.999	0.999	0.996	0.475
SQP	0.999	0.999	0.998	0.419

Note(s): APB: Actual Purchase Behaviour, ATT: Attitude, BI: Behavioural Intention, LOY: Attitudinal loyalty, SAT: Satisfaction, SN: Subjective Norms, SQP: Service Quality Perceptions

Source(s): Authors' own work

Generation X compared with Generation Y, as evidenced by a significant difference in the value of its R^2 coefficient (see Table 8). In summary, Generation X customers seem more sensitive to the opinions of their immediate social circle, such as family, friends and people they respect, with regard to the consumption of fast-food, suggesting that social influence plays a greater role in shaping their intentions to patronise QSRs than it does among Generation Y participants.

5. Discussion and conclusions

The present study has analysed factors that drive customers' actual purchase behaviour (APB) in the context of QSRs, thereby addressing the noted research gap on consumer decision-making (DiPietro, 2017), and particularly the paucity of studies that have evaluated the influence of service quality perceptions on APB (Mendocilla *et al.*, 2026). It also responds to criticisms by Lai *et al.* (2018) of the lack of theoretical grounding in many studies examining service quality. By integrating two complementary theoretical frameworks (the Theory of Reasoned Action (TRA) and the Service-Profit Chain) we were able to identify a number of factors that influence APB. From the TRA perspective, our findings support the extant evidence suggesting that internal beliefs and social pressure influence customers' behavioural intentions towards the QSR business model, which ultimately translates into actual behaviour at a specific restaurant. From the Service-Profit Chain perspective, factors related to operational management, such as customer satisfaction, perceived service quality during the transaction, and attitudinal loyalty to a specific QSR brand, emerge as key drivers of APB.

The findings obtained using PLS-SEM demonstrate that the integration of these two frameworks is both theoretically sound and a commendable step towards a comprehensive model for better understanding and even predicting consumer behaviour in the QSR sector. This business model has unique characteristics that have given rise to diverging opinions, with both proponents and critics of fast-food restaurants, as reflected by the modest-to-low scores for attitude, subjective norms, and intentions to eat at such establishments. This clearly suggests that customers' opinions about such restaurants have a significant impact on their

Table 8. Results of the permutation test-based multigroup analysis (Gen Y vs Gen X)

Structural relationship	Original GEN_Y	Original GEN_X	Original difference	Permutation mean difference	2.5%	97.5%	Permutation *p*-value
ATT → APB	0.163	0.029	0.134	−0.037	−0.309	0.272	0.391
ATT → BI	0.217	0.148	0.069	−0.03	−0.246	0.196	0.562
BI → APB	0.118	0.24	−0.121	0.015	−0.265	0.29	0.38
LOY → APB	0.372	0.132	0.241	0	−0.31	0.329	0.143
SAT → APB	0.276	0.385	−0.11	0.002	−0.307	0.323	0.499
SAT → LOY	0.203	0.235	−0.032	−0.004	−0.274	0.267	0.828
SN → BI	0.531	0.771	−0.24	0.009	−0.172	0.209	0.013
SQP → APB	−0.174	0.013	−0.187	−0.001	−0.385	0.37	0.324
SQP → LOY	0.542	0.628	−0.086	0.004	−0.225	0.251	0.487
SQP → SAT	0.573	0.699	−0.126	−0.003	−0.177	0.178	0.165
Coefficients of determination							
R^2 (APB)	0.339	0.39	−0.051	−0.05	−0.266	0.162	0.679
R^2 (BI)	0.411	0.715	−0.304	−0.023	−0.215	0.184	0.002
R^2 (LOY)	0.461	0.656	−0.196	−0.008	−0.201	0.193	0.051
R^2 (SAT)	0.328	0.489	−0.161	−0.008	−0.231	0.204	0.15

Note(s): APB: Actual Purchase Behaviour, ATT: Attitude, BI: Behavioural Intention, LOY: Attitudinal loyalty, SAT: Satisfaction, SN: Subjective Norms, SQP: Service Quality Perceptions

Source(s): Authors' own work

decision to frequent them and, ultimately, their dining experience. The TRA provides an excellent lens for assessing customers' thoughts and feelings, while the Service-Profit Chain is an ideal framework for evaluating the impact of factors that contribute to the customer experience during the service encounter at a specific QSR, which include the quality of service, satisfaction and attitudinal loyalty. We find that service quality and satisfaction at the point of purchase influence how customers behave during the transaction. In turn, attitudinal loyalty reinforces repeat purchasing, since the stronger the intention to return, the greater the frequency of purchase among customers should be.

In light of these results, it is clear that customers' previous beliefs and feelings about QSRs in general are key drivers of their actual behaviour. These findings align with Dunn *et al.* (2011), who also identified a strong relationship between intention and consumption behaviour in fast-food restaurants, as did De Cannière *et al.* (2009) in the clothing retail sector and Chih *et al.* (2015) in the e-commerce sector (albeit only using retrospective questions to assess APB).

This study also confirms the positive influence of satisfaction on APB, which is consistent with Bruwer (2014) and Kumar *et al.* (2014) in the wine and airline sectors, respectively. The positive impact of loyalty on customers' APB is also supported by the Service-Profit Chain, which posits that loyalty stimulates repeat purchasing, which in turn increases the frequency of visits, leading to higher sales and profits (Heskett *et al.*, 1994; Yee *et al.*, 2009).

No direct influence of perceived service quality, a key factor of service encounter management, was observed on APB. However, an indirect influence through immediate satisfaction and attitudinal loyalty was identified. Specifically, it is immediate perceptions of service quality during the purchase interaction that determine the satisfaction (or dissatisfaction) that a customer feels at that moment, which in turn influences their APB. If customers perceive a kindly, proactive, fast service that gives them immediate satisfaction, they will probably be more willing to place larger orders and to visit the restaurant more often. This finding reinforces the view that service quality perceptions influence customer behaviour indirectly by triggering satisfaction and fostering attitudinal loyalty.

Moreover, this study confirms earlier findings (Ghosh *et al.*, 2023; Lai, 2015; Mason *et al.*, 2016; Nguyen *et al.*, 2018; Richardson *et al.*, 2019) that perceived service quality exerts a strong influence on both satisfaction and loyalty, but contradicts (Namin, 2017), who found no such relationship in the QSR context. The findings underscore the crucial need for effective service quality management during service encounters to ensure customer satisfaction, build loyalty, and generally develop strong service branding (Nam *et al.*, 2011).

This study also confirms the strong influence of satisfaction on attitudinal loyalty that is widely recognised in prior QSR research (e.g. Namin, 2017; Richardson *et al.*, 2019). While Namin (2017) found a high impact of customer satisfaction on intentions to recommend, to return to the same fast-food restaurant, and to say positive things about it, Richardson *et al.* (2019) found this effect to be somewhat more moderate. This causal relationship is also supported by the conceptual foundations of the Service-Profit Chain, which holds that satisfaction leads customers to develop loyalty to their service provider (Yee *et al.*, 2009).

Finally, the multigroup analysis indicates that Generation X customers attach the greatest importance to the opinions and beliefs of respected individuals in their close circle when it comes to fast-food restaurants, while Generation Y customers are less influenced by their subjective norms and more by their personal attitudes towards the QSR business model. These findings present a substantial opportunity for the specific QSR chain, given that Generation Y constitutes its primary target demographic. Nevertheless, members of this generation attach considerable importance to their own internal beliefs and values, which in turn shape their attitudes towards the QSR business model. Consequently, they are more responsive to rising health concerns and to the persistent criticism directed at fast-food restaurants.

5.1 Theoretical implications

Overall, this study makes several key contributions. To the best of our knowledge, it is the first to use purchase receipts to collect information on the foodservice industry, and only the second to have addressed customers' APB in the context of QSRs. Concerning the measurement of purchase behaviour, almost half of previous articles in other sectors have used at least one indicator related to purchase or visit frequency (e.g. De Cannière *et al.*, 2009; Chih *et al.*, 2015). Only a few studies have considered the amount spent (e.g. Bruwer, 2014) and even fewer have included the quantity of purchased products (e.g. De Cannière *et al.*, 2009). Moreover, most of these studies employed surveys to measure retrospective behaviours rather than gathering real sales data. Hence the present research validates the usefulness and reliability of combining three indicators (amount spent, quantity of purchased products and purchase frequency) to provide a more comprehensive view of actual customer behaviour in the QSR sector.

This study also supports the use of the TRA to predict APB in QSRs, as evidenced by the robust relationships identified between subjective norms, attitude, and behavioural intention. Furthermore, by integrating the TRA and the service perception component of the Service-Profit Chain, a holistic conceptual model is proposed for studying APB from both attitudinal and operational perspectives. PLS-SEM proved to be an appropriate multivariate technique for developing and testing this exploratory structural model (Henseler, 2018), which integrates two theoretical frameworks and includes formative, reflective and second-order constructs.

The service perception component is shown to be an optimal framework for analysing the interrelationships between service quality, satisfaction, loyalty, and APB. In fact, this is the first study to examine these relationships in the restaurant sector. The findings confirm the utility and reliability of the four dimensions for assessing service quality captured by the QUICKSERV scale, demonstrating that this second-order construct can effectively encompass all service quality elements in a complex conceptual model.

5.2 Practical implications

Given the particularities of the QSR business model, and the short time that its customers spend at the service counter (Massimino and Lawrence, 2019), it is imperative for QSR managers to understand what drives APB in order to align their operational and marketing strategies with the goal of increasing average purchase amounts and frequency, while ensuring a satisfactory customer experience.

The findings provide evidence that customers' attitudes and intentions towards the QSR business model, encompassing both personal beliefs and internalised social influences, play a pivotal role in predicting and understanding APB at fast-food restaurants. Consequently, the top and middle management teams of QSR chains should prioritise strategies that not only promote their own QSR brand but also enhance the broader reputation of the QSR business model.

It is important to acknowledge the shared identity of the fast-food sector in general. Utilitarian attributes such as standardised quality, convenience, and value for money relate to all such establishments, and rather than individual brands, decisions often relate to QSRs as a whole (Harrington *et al.*, 2017). Indeed, in light of the growing importance of food and menu quality in the restaurant industry (DiPietro, 2017), together with rising consumer concerns around health and nutrition (Gallarza-Granizo *et al.*, 2020; Sun and Moon, 2023), QSR chains need to engage in collaborative endeavours to address the prevailing negative perceptions of fast-food restaurants, which are often perceived to offer "junk food" and "poor customer service".

The internalisation of such perceptions and the serious questioning of the QSR business model are reflected by the low mean values for attitude, subjective norms, and behavioural intentions compared with factors related to service perceptions. As a result, while these psychological factors significantly influence behaviour, their effects are less pronounced than

those of operational variables such as satisfaction at the service encounter, and attitudinal loyalty to the specific QSR brand.

Moreover, given the global expansion and popularity of the QSR business model across diverse generational groups, supranational and governmental bodies focused on public health management have increasingly prioritised the regulation and scrutiny of the nutritional aspects of fast-food restaurant offerings. This is another reason why customers' reported attitudes and intentions towards the QSR business model tend to be low. It is therefore essential for the QSR sector to implement improvements and diversify its gastronomic offerings, a process that many QSR chains have already begun.

Consequently, the social implications of this study are twofold. First, the findings show that individuals' concern and awareness regarding healthy eating habits are reflected in the low scores reported for attitudes, subjective norms and intentions. Second, although the scores tend to be low, and may vary across generational cohorts, they still have a degree of influence on APB. Therefore, efforts to address and promote public health concerns should not solely rely on QSR chains, which are increasingly incorporating healthy food options and practices into their strategies, but also on government bodies, which must continue to reinforce their messages about healthy and lifestyle habits.

With regard to the implications for the specific QSR chain in which this study was conducted, the findings indicate that customer satisfaction during the service interaction is the primary driver of APB. Given the mean satisfaction level of 5.33 out of a maximum of 7, its managers should strive to consistently ensure satisfactory purchasing experiences, as happy customers are likely to consume more. It is broadly acknowledged that repeatedly satisfying shopping experiences engender customer loyalty (Oliver, 1999), which in turn boosts APB. Customers exhibiting a high degree of attitudinal loyalty are likely to visit more frequently, and to spend greater amounts on a larger number of products (Ryu and Han, 2011), so this QSR chain should focus on improving its customer relationship management and loyalty programmes. This particular restaurant had no such scheme and was hence unable to map the actual purchase frequency of its customers, although good levels of attitudinal loyalty were nevertheless reported.

Our analysis may suggest that perceptions of this particular QSR chain's service quality were good, but its managers still need to implement measures to consistently monitor all aspects in this regard and act accordingly. They are encouraged to adopt the QUICKSERV scale as a diagnostic tool, which requires minimal time to complete and provides a concise yet comprehensive assessment of service quality dimensions.

Rather than implementing a continuous monitoring system for service quality based on customer perceptions, this QSR chain relies on periodic monitoring by its master franchiser, as well as on a mystery shopping programme. We therefore recommend the introduction of a systematic assessment of service quality perceptions. Upholding food quality standards, providing a fast and friendly service, offering comfortable facilities, and creating an inviting atmosphere all contribute to a satisfactory purchase experience and the formation of a loyal customer base that consistently patronises the same QSR brand regardless of location.

In short, all of the factors that influence APB are within managerial control. QSR managers must be attentive both to customers' internal beliefs and to all tangible aspects of the service encounter. A holistic strategy that integrates marketing and operational perspectives should be implemented to ensure that each restaurant functions efficiently and maintains its own quality standards. In order to achieve sustained profitability, QSR chains must strategically manage all of the factors analysed in this study, as each interacts with the others and neglecting any one of them could undermine customers' APB and consequently performance outcomes.

5.3 Limitations and future research

The study has several limitations. First, the data was collected from customers of a single franchised restaurant, and its privileged location in a highly touristic area of Barcelona may

limit the generalisability of the findings to locations that are less dependent on tourism. However, it offers a valuable benchmark for comparative studies in different settings.

Second, the use of a convenience sampling approach may have introduced sampling bias, since the participants were selected on the basis of their accessibility, rather than through random sampling. Consequently, the sample might not fully represent the broader population, and the findings should therefore be interpreted with caution as they may not be generalisable beyond the study context.

Third, frequency of purchase was measured using a prospective question, while the other two elements of APB were captured from purchase receipts. This limitation presents opportunities for future research to develop new methods for assessing this item more realistically, perhaps by using restaurant management systems or loyalty tracking programmes that record each visit and transaction that a registered customer makes.

Another limitation concerns the uneven sample sizes across generational cohorts. As one of our cohorts was almost three times larger than the others, a full multigroup analysis was difficult. Even so, significant differences were detected between Generation Y and X, providing a useful starting point for future research.

These limitations aside, it is important to acknowledge that this study is pioneering within the QSR context, as it is the first to examine the impact of service quality and satisfaction on actual purchase behaviour. The proposed model is a primary step towards the development of an all-encompassing methodology for thoroughly understanding what drives APB. Future studies should seek to test, refine, and validate this model across different chains, cultural contexts, and operational formats.

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