



# Exploring the main drivers influencing brand loyalty to motorway services areas in Italy

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Received: 3 March 2020 / Accepted: 7 May 2020 / Published online: 15 May 2020  
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## Abstract

Due to the emergence of new shopping trends in alternative retailing formats, the paper aims at exploring the role of assortment levers to increase customer loyalty to the retailer's brand in an on-the-go retailing format, such as motorway service areas (MSAs). Specifically, the paper investigates how the grocery assortment perception (GAP) of MSAs influences shopping satisfaction and shopping enjoyment, generating customer loyalty to the MSA. A mobility proxy, measured in terms of the number of kilometres driven in a month, was included as an antecedent of consumers' loyalty to MSAs. Survey data were collected from 526 respondents during their stop in three MSAs. The covariance-based structural equation model was computed to estimate the direct and indirect effects. The findings show that the perception of assortment is a significant driver of loyalty to the MSA retailing format. Most remarkably, the results show a positive relationship between the customer's mobility and his/her loyalty to the MSA brand. The paper focuses on an emerging, although poorly investigated retail context, MSA, in which companies are enlarging the grocery assortment to offer the opportunity to shop during the consumption. Implications in terms of competition between incumbent grocery retailers and companies operating MSAs are derived. Moreover, a new conceptualisation of consumers' mobility in influencing the retailer's brand loyalty is prosed when shoppers are on-the-go.

**Keywords** Brand loyalty · Mobility · Grocery assortment perception · Shopping satisfaction · Shopping enjoyment · CB-SEM

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## 1 Introduction

New trends of shopping and consumption are remodelling the retailing sector and supporting the spread of alternative retailing formats (Jayasankara and Aryasri 2011); for instance, the increasing out-of-home consumption that fosters the rise of new shopping models (18% of meals in Europe—Girafoodservice 2018). In particular, a new shopping logic—in which the consumption meets the shopping—is favouring the emergence of non-traditional retailers (e.g., Eataly) that offer consumers the opportunity to buy a selection of high-quality food products, drink a coffee, have lunch/dinner or buy books in one single place (Massa and Testa 2012). Moreover, the increasing ubiquity of individuals, both for personal and professional reasons, has led to the emergence of incumbent grocery retailers operating in the trip context (Sari et al. 2017; Martinelli 2012), such as in airports, train and bus stations or motorway service areas (hereinafter MSAs), among others.

In this regard, MSAs are evolving their offer towards the need of convenience increasingly requested by “*mobile consumers*”. Managers seek to improve their relationships with customers to increase their competitive advantages (Helgesen et al. 2010), and convert MSAs’ cafeteria and quick food service areas into convenience stores—favoured by their growing ubiquity and 24/7 opening hours; i.e., their offer based on dining services and a few trip products is mixed with everyday commodities, such as groceries, tobacco, books, clothing and drugs, among others. Grocery stores have then begun to have comparable offers among each other (cf. Delgado-Ballester and Munuera-Alemán 2001; Corstjens and Lal 2000), and alternative retailing formats arose in the trip context (e.g., MSAs), harming customer loyalty. To sum up, due to the emergence of out-of-home consumption (Heider and Moeller 2012) and the scant literature related to the hybrid retail format in petrol stations (Sari et al. 2017; Helgesen et al. 2010), our research aims at understanding how to engender mobile consumers’ loyalty.

Firstly, our research seeks to understand if the assortment strategy fosters customer loyalty in a context that is apparently unfavourable to generate consolidated preferences and loyal behaviours. Although the widespread presence on the entire motorway network, and not only there, could somehow result in a faithfulness to the retailer’s brand, catering services for trippers could not take advantage of multiple close-in-time visits to build a long-term relationship and evidence limited levers to emotionally retain consumers. MSAs are also strictly constrained in terms of store size and location, forcing their managers to focus their competitive strategies on features such as price, quality and visual merchandising (Martinelli 2012). That is to say, the price, quality and presentation of the assortment influence consumers’ store choice and their retailer’s brand loyalty, resulting in proxies of a long-term retailer success because of their influence on brand loyalty. And consequently, shopping satisfaction and enjoyment can be significantly formed by influences of perceived assortment on a retailer’s brand loyalty (cf. Bauer et al. 2012; Chernev and Hamilton 2009; Rubio et al. 2017).

Secondly, our research contributes to the retailing literature with a conceptual and empirical analysis of the proxy mobility in influencing MSA’s brand loyalty.

Indeed, while the reduced store distance was traditionally considered as a key predictor for store choice (Reilly 1931), and a proxy for potential total sales and market share (Applebaum 1966), the increased consumers mobility and the paucity of time of modern consumers call for a redefinition of the concept of the distance to the store (Hagberg and Holmberg 2017; Nordfalt 2009). The habits of the modern consumer, increasingly mobile for both personal and professional reasons, can cause an upheaval in the traditional foundations of the retailing sector. Accordingly, due to contrary findings present in the literature, more academic research on how the increasing mobility of modern consumers is changing the logic of the distance to the store is required.

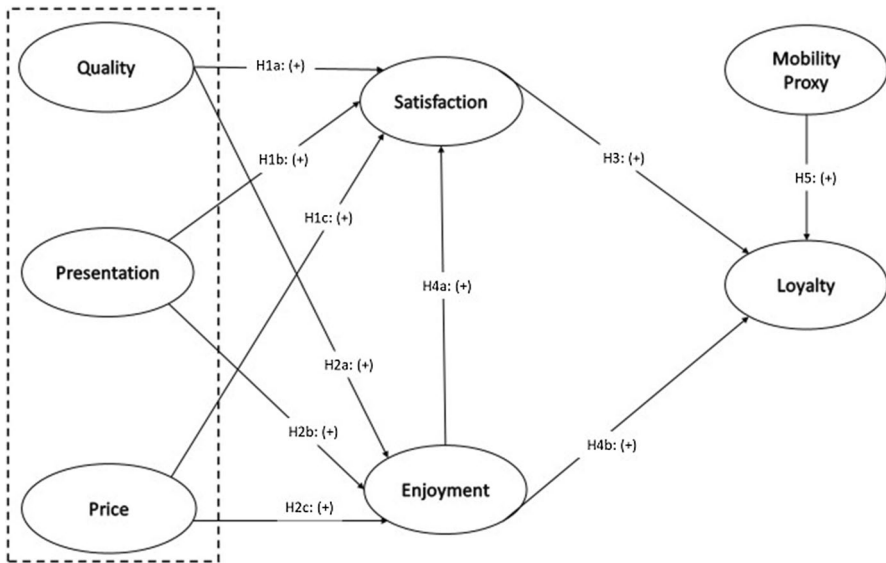
Our research is structured as follows: in the next section the retailer's brand loyalty literature is reviewed, with a specific focus on brand loyalty to MSAs. Then, the framework of the current study (Sect. 2) and the research hypotheses (Sect. 3) are developed. The fourth and fifth sections propose the empirical analysis and the main results. In the sixth section theoretical and managerial implications are derived, ending with future research directions and possible study limitations.

## 2 Theoretical framework and hypotheses

The retailer's brand loyalty is here defined as "the level of customer psychological attachments and attitudinal advocacy towards the service provider/supplier" (Chaudhuri and Holbrook 2001, p. 82). Although petrol stations and convenience stores have been commonly considered as two different businesses due to their reciprocal attractiveness, both business models are converging into a hybrid retail format (Sari et al. 2017). Due to their enormous diffusion and the absence of time constraints for their stores' access, MSAs have gained an increasing role in the retailing sector, assuming the key need to create competitive advantages based on assortment perceptions and their influence on shopping satisfaction and enjoyment (Helgesen et al. 2010) (see Fig. 1).

### 2.1 Grocery assortment perception

"Distinction between the formats is getting blurred in the mind of consumers because they can buy the same grocery products seemingly everywhere" (Jayasankaraprasad and Kathyayani 2014, p. 107). In this sense, the assortment, defined as the number of different items in a merchandise category, is considered as a key dimension of the store image, and a relevant predictor of the consumer store choice decision (Guenzi et al. 2009; Ruiz-Real et al. 2017). Assortment is the main lever to acquire and retain consumers (Baker et al. 1994; Bauer et al. 2012; Pan and Zinkhan 2006; Seiders et al. 2005). Fox et al. (2004) concluded that, especially in grocery stores, the assortment achieves a main strategic role in enhancing brand loyalty. Bauer et al. (2012) also stated its importance in influencing the retailer's sales, profits and long-term success. In particular, these authors suggested a multi-item scale for measuring



**Fig. 1** Theoretical model and research hypotheses

consumers' perceptions of grocery assortments, identifying four different facets: variety, quality, price and presentation (Bauer et al. 2012).

Although the assortment size is traditionally considered one of the most important attributes in store choice, over-assortment might lead consumers to postpone or, in the worst case, to avoid the purchase due to the choice overload (Scheibehenne et al. 2010). Variety can increase decision difficulty and cause post-decision regret (Chernev et al. 2015). Individuals could therefore prefer a small high-quality assortment to a large low-quality assortment (Kwak et al. 2015). Moreover, they might assess store physical constrictions, and evaluate favourably how the assortment maximises their value based on retail formats (Noble et al. 2005).

Accordingly, due to the assortment size constriction of the trip store format and to consumer expectations based on the store format, the variety and complexity of a growing number of products would reduce its importance in MSAs overall assortment perceptions. Following Helgesen et al. (2010), the variety-based assortment dimension is then dropped from our research.

Secondly, assortment quality is classified via three indicators, i.e., the number of organic products, the freshness of products offered in the category, and the number of well-known national brands. Perceived quality is assumed differently depending on the store format (Pan and Zinkhan 2006), and evolves due to added information, increased category competition and changing customer expectations (Zeithaml 1988). On the other hand, assortment price represents a service quality proxy, i.e., a higher price might correspond to a higher quality level (Pan and Zinkhan 2006). In retailing, assortment price refers to the overall retailer price positioning and the relative quality positioning and differs according to the store format. Notwithstanding, the perception of price is highly related to the time and efforts spent on shopping.

“Reduced time, effort and search costs can reduce perceived sacrifice” (Zeithaml 1988 p. 18). Furthermore, customers use heuristics to evaluate products (Bauer et al. 2012) and, consequently, the assortment presentation assumes a fundamental role in store evaluation and in the intention to re-patronise it. Assortment presentation represents bonded features such as product displays, merchandising, layout and appearance (Aurier and Séré de Lanauze 2011).

To sum up, as proposed by Lombart et al. (2018, p. 123), store brands assortment shows a significant impact “on consumers’ attitude towards brands (cf. Collins-Dodd and Lindley 2003; Rubio et al. 2017) and consumers’ buying behaviour of these brands (cf. Martos-Partal and González-Benito 2013; Rubio et al. 2017)”. Customers employ heuristics to assess offers and, as a result, the assortment presentation takes on a fundamental role in store evaluation and patronise decisions (Bauer et al. 2012). These authors analysed the effect of the grocery assortment perception (GAP) as a second-order factor expressing that the assortment dimensions jointly contribute to the long-term retailers–consumers’ relationship. Assuming that dimensions of the assortment form consumers’ subjective overall judgments of an assortment offered in a particular grocery category (Bauer et al. 2012), our research proposes a significant relationship between the GAP’s indicators and shopping satisfaction (Helgesen et al. 2010). Moreover, following the findings of Wong et al. (2012), quality, assortment and price have a positive association with “consumers’ subjective psychological states of enjoyment and arousal” (p. 241). As suggested by Helgesen et al. (2010), assortment extension becomes an essential driver of brand loyalty through the mediating effect of shopping satisfaction to make them similar to convenience stores (Sari et al. 2017). Accordingly, we can posit as follows:

**H1a.** Assortment quality perception is positively related to shopping satisfaction.

**H1b.** Assortment presentation perception is positively related to shopping satisfaction.

**H1c.** Assortment price perception is positively related to shopping satisfaction.

**H2a.** Assortment quality perception is positively related to shopping enjoyment.

**H2b.** Assortment presentation perception is positively related to shopping enjoyment.

**H2c.** Assortment price perception is positively related to shopping enjoyment.

## 2.2 Shopping satisfaction and enjoyment

Shopping satisfaction represents the favourable affective response of customers who rely on the retailer and find the overall service interactions rewarding, fulfilling and stimulating based on past experiences (Homburg et al. 2005; Seiders et al. 2005), and is defined as the customer’s overall experience with a particular firm over time (e.g., Seiders et al. 2005). In this regard, as customers become familiar with MSAs, they assess them as a shopping alternative to satisfy their ever-increasing

shopping needs. On the other hand, shopping enjoyment is defined as “the pleasure one obtains in the shopping process” (Beatty and Ferrell 1998, p. 174), and is assessed as the main driver of attitudinal loyalty to the retailer (Johnson et al. 2015). Customers who perceive shopping experiences as enjoyable show a positive attitude towards purchases, visiting the store frequently (Hart et al. 2007), and buying more (Childers et al. 2001). Designing pleasurable encounter experiences (related to emotional-seeking activity, and closely related to shopping satisfaction) then becomes imperative for retailers (Bagdare and Jain 2013). Shopping enjoyment (e.g., how enjoyable the retailer and encounter experiences would be) is therefore considered a significant driver of the long-term relationship between retailers and consumers. Shopping enjoyment expresses “consumers’ positive perception of a store based on different (salient) attributes [that create] high levels of pleasurable feelings and lead to their enjoyment of spending time in the area” (Johnson et al. 2015, p. 21), generating long-lasting relationship with the service provider (Alnawas and Hemsley-Brown 2018).

Accordingly, MSAs need to propose cues based on variety seeking to foster positive emotions that improve the experiences of interest and enjoyment, as well as the satisfaction derived from the activity. The perceived enjoyment is an important “hedonic benefit” (Babin et al. 1994) that is considered among the main contributors to loyalty and repatronage behaviour (Hart et al. 2007); i.e., consumers who perceive their buying experience as enjoyable increase their favourable attitude towards the shopping-based context. A customer’s emotional state might enhance a favourable performance based on overall service interactions being rewarding and fulfilling, resulting in a positive effect on their loyalty (Johnson et al. 2015). To sum up, shopping satisfaction and positive emotions exert a primary role in the creation of a relationship with the retailer (e.g., Wong et al. 2012). Thus, we postulate the following hypotheses:

**H3.** Shopping satisfaction positively influences brand loyalty.

**H4a.** Shopping enjoyment positively influences shopping satisfaction.

**H4b.** Shopping enjoyment positively influences brand loyalty.

### 2.3 Proxy of mobility

Trip time is considered among the most relevant determinants of consumer expenditure at retailer’s outlets (e.g., Oppewal et al. 1997). Jayasankara and Aryasri (2011) stated that “the closer the consumers are to a store, the greater their likelihood of buying from that store” (p. 70)—primarily for high-frequency convenience goods and low involvement and risk, such as grocery items. Grocery customers evidence higher preference for conveniently located store-formats, which use less trip time (Jayasankaraprasad and Kathyayani 2014). Although store choice is mainly influenced by *convenience* and *time-saving* (McGoldrick and Andre 1997) and the distance travelled to the store has in some research shown negative influences on store choice (Jayasankara and Aryasri 2011), in other research the distance does not necessarily become a negative driver (Briesch et al. 2009). Stanley and Sewall (1976) found that stores with a positive image attract remote customers (e.g., shopping

malls). Non-economic consumers based on recreational (entertainment-based) aspects of shopping (*vs* functional or utilitarian aspects of shopping) *like* shopping and perceive benefits of it –not attempting to minimise the time and effort spent engaging in it (see Babin et al. 1994; Reynolds and Beatty 1999). Similarly, Hsu et al. (2010) found a positive relation between trip distance and shopping satisfaction. The effect of a greater distance travelled to the store could favourably affect the store choice. Moreover, recent studies -related to the greater mobility of modern customers- redefine the concept of the distance to the store (Hagberg and Holmberg 2017; Nordfalt 2009). Analysing people who travel by car, as they “go to the store more often than the average consumers” (Hagberg and Holmberg 2017, p. 1001), these authors propose a positive effect between the mobility proxy and the retailer’s brand loyalty, considering that the more the opportunity to encounter the retailer’s store, the more the loyalty to the retailer’s brands.

To sum up, the mobility could positively influence brand loyalty, and consequently, we postulate the following hypothesis:

**H5.** The proxy of mobility positively influences brand loyalty.

### 3 Methodology

The empirical analysis was performed in Italy as it represents the European country with the highest value of out-of-home consumption, equal to 60.8€ million (Girafoodservice 2018). Moreover, in the Italian market, MSAs are located at half the average distance of European MSAs (Mercurio and Martinez 2015). Italy is an interesting country, where grocery retailers are investing to enter the fuel market both through the opening of fuel stations close to their grocery stores (Martinelli and De Canio 2017) and with the opening of convenience stores in MSAs (De Canio et al. 2016). Carrefour Express in MyChef service areas, convenience stores such as Market24 for Autogrill, Chef Store for Chef Express and Elite travel retail and duty-free group Airst, are widespread. The relevance of groceries in MSAs’ strategies is confirmed by the several cooperation activities that MSA operators are doing with both manufacturers and retailers. Thus, for example, Autogrill and P&G are cooperating to introduce impulse/emergency products in service areas to meet consumers’ needs (Fazio and Resciniti 2011). Moreover, the MSA operator has signed an agreement with Eataly to introduce 2000 fresh regional products in a Service Area (Eataly).

#### 3.1 Participants

Data were collected in three different Italian MSAs, on the Autosole and Adriatic motorways, located at an overall distance of 400 kilometres, to control for bias related to specific peculiarities of the location. The MSAs were selected for their extensive assortments of grocery and food delicacies, tobacco, books, clothing, drugs and tech-tools. The respondents, randomly approached at various times during their stops in MSAs, were asked to fill in a structured questionnaire. A total of

671 questionnaires were gathered and 526 completed and valid questionnaires were usable for this study.

The respondents, aged between 18 and 83 years (mean: 39 years old), are mainly men (78.9%). They are heterogeneous in terms of the kilometres driven per month (mean: 3097 km). 50.5% of the respondents were on vacation, 23.8% were travelling for work reasons, 3.1% were commuters, while 22.6% were on the MSA for other reasons (e.g., school or group trips, family-related trips, among others).

### 3.2 Measures

The respondents were requested to evaluate the general Grocery Assortment Perception (GAP) via three assortment characteristics: quality, presentation and price. The GAP concept was measured through three dimensions adapted from Bauer et al. (2012): quality (3 items), presentation (2 items) and price (2 items). Items for satisfaction (5 items) and enjoyment (3 items) were adapted from Seiders et al. (2007). A three-item scale adapted from Bove and Mitzifiris (2007) measured brand loyalty. All items were evaluated on a 7-point Likert scale, (1 = strongly disagree and 7 = strongly agree).

The construct measures, presented in Table 1, were previously pre-tested and validated on a limited sample of MSA users. The mobility proxy was measured with an open-ended question in which the respondent entered the average number of kilometres that they travelled by car in a month.

### 3.3 Measure validity and data analyses

To address the research hypotheses, a covariance-based structural equation model (CB-SEM) with the maximum-likelihood method (ML) was performed using the Lisrel 8.80 software (Jöreskog and Sörbom 2006). A two-step approach was used to analyse data, as recommended by Anderson and Gerbing (1988): confirmatory factor analysis (CFA—to test the unidimensionality and convergent validity of the constructs) and a structural equation model (SEM). The psychometric analysis of the scales investigated assessed the convergence and discriminant validities. All factor loadings are above 0.70 (see Table 1) and significant at 99%, confirming the convergent validity (Hu and Bentler 1999).

All items exhibit a high item-total correlation and indicate their capability of measuring the construct. Average Variance Extracted (AVE) and Composite Reliability (CR) assessed the convergent validity. Both indicators are clearly greater than the threshold cited in the relevant literature (AVE > 0.5 and CR > 0.7; Fornell and Larcker 1981) (see Table 2). The discriminant validity is assessed using the Fornell and Larcker criterion: the square root of AVE for each construct is greater than the correlations for each construct in the relevant rows and columns (Fornell and Larcker 1981).

Finally, the overall model fit indexes show a good measurement model. Although the significant robust Satorra-Bentler Chi Squared ( $\chi^2_{(137)} = 733.879$ ) and the RMSEA = 0.0911—Test of Close Fit (RMSEA < 0.05) = 0.000 due to



**Table 1** Descriptive statistics of items and latent constructs

Construct/items	Factor loading	T-statistics
<i>Brand loyalty</i>		
I consider myself loyal to X	0.903	n.d.
I will not buy products from other retailers if I can buy the same item at X	0.837	26.091
X would be my first choice	0.805	21.658
<i>Shopping satisfaction</i>		
I trust retailer X	0.907	n.d.
I rely on retailer X	0.904	38.294
I have confidence in retailer X	0.860	28.369
I am pleased with the overall service at X	0.852	25.044
Shopping at X is a delightful experience	0.751	20.679
<i>Shopping enjoyment</i>		
I find shopping in X to be enjoyable	0.914	n.d.
Shopping in X is pleasant	0.931	42.045
I have fun shopping in X	0.877	31.440
<i>Assortment quality perception</i>		
X offer consistently high-quality products	0.888	n.d.
X offer very reliable products	0.867	25.486
The characteristics of products offered by X are excellent	0.868	24.750
<i>Assortment presentation perception</i>		
The way products are displayed in X is appealing	0.899	n.d.
Products in X are logically arranged	0.861	23.169
<i>Assortment price perception</i>		
The assortment in X offers good value for money	0.906	n.d.
This assortment in X offers various price ranges to choose from	0.803	20.307

**Table 2** Convergent and discriminant validity and correlation matrix

	AVE	CR	LOY	SAT	ENJ	QUAL	PRES	PRICE
LOY	0.645	0.886	<b>0.803</b>					
SAT	0.688	0.932	0.790	<b>0.829</b>				
ENJ	0.824	0.933	0.725	0.748	<b>0.908</b>			
QUAL	0.764	0.907	0.676	0.853	0.641	<b>0.874</b>		
PRES	0.775	0.873	0.534	0.658	0.542	0.701	<b>0.880</b>	
PRICE	0.733	0.845	0.603	0.726	0.634	0.711	0.646	<b>0.856</b>

The elements on the main diagonal (bold) represent the square root of the AVE

the influence of the sample size and to the survey methodology, other fit indexes respect the threshold values (Hu and Bentler 1999), as follows: Goodness of Fit Index (GFI)=0.841; Comparative Fit Index (CFI)=0.977; Normed Fit Index (NFI)=0.972. The value for the Standardized RMR (0.0486) is very low, showing no problems with residuals.

## 4 Results

The structural model appears to have appropriate predictive power for most of the dependent variables. The R-square values exceeded the required value of 0.10. The explanatory power of the model is very high in explaining attitudinal loyalty (67%), shopping satisfaction (76%) and shopping enjoyment (48%).

The first hypotheses proposed between GAP and shopping satisfaction and enjoyment are confirmed, except for the effect of presentation on shopping satisfaction ( $H2_a$ :  $p=0.296$ ) and shopping enjoyment ( $H2_b$ :  $p=0.110$ ). Indeed, contrary to our expectations, our research finds a poor effect of merchandising and product presentation on shopping satisfaction and enjoyment. This result could be due to both constrictions related to store size and the competitive strategy adopted by managers of the service areas that propose a standard assortment layout, scarcely exploiting the effect of merchandising—as in the case of supermarkets. The quality of the assortment reveals the main impact on overall satisfaction and enjoyment during the shopping expedition (see Fig. 2). The more the quality of products are perceived as being high, reliable and consistent, the more consumers feel satisfied and enjoy their shopping. Moreover, price (i.e., an assortment that offers good value for money and a large price scale) shows positive effects on an enjoyable and satisfying shopping expedition in MSAs. The effects of satisfaction and enjoyment on brand loyalty are generally significant, as well as the direct effect of enjoyment on satisfaction is positive and significant, confirming H3, H4<sub>a</sub>, H4<sub>b</sub>.



Notes: \*All path coefficients are significant at the  $p$ -value  $\leq 0.01$  level (two-tailed test)

\*\*All path coefficients are significant at the  $p$ -value  $\leq 0.05$  level (two-tailed test)

n.s. All path coefficients are not significant

Fig. 2 Structural model results

To test the indirect effect of GAP dimensions on brand loyalty via the mediation of shopping satisfaction and enjoyment, the mediation test was performed using both the Sobel test and asymmetric 95% confidence interval (PRODCLIN procedure—MacKinnon et al. 2007) (Table 3). As shown by the results presented in Table 3, shopping satisfaction and enjoyment partly mediate the relationship between the assortment perception and the customer loyalty to the MSA retailer's brand.

Finally, the results show an interesting result concerning the effect of the mobility proxy on the loyalty to the MSA brand. Indeed, our results show a positive and significant effect between the two aspects. Contrary to traditional retailing findings in which a lower distance corresponds to a higher store choice, in the context of “mobile” consumers the distance has an overall positive effect on loyalty. Indeed, the more the consumers drive in a month, the more they establish a sense of loyalty to hybrid retailing formats, such as MSAs.

## 5 Theoretical and managerial implications

Due to the growing need of modern consumers to purchase conveniently, incumbent retailers are revising their offer. Traditional grocery retailers are now competing with emerging hybrid retail formats proposed by alternative operators (e.g., MSAs) with different characteristics, able to combine consumption with shopping. MSA retailers operating in the travel sector have extended their core offer, becoming a *serious* alternative for grocery shopping. Exploiting a sales network open 24/365 per year, and through the growing number of consumers that stop every day in MSAs, service area operators have become a real opportunity for grocery shopping. On the one hand, consumers' greater mobility expands their shopping area from the place they live into the total area they travel in. On the other hand, the extension of the offer proposed by MSA operators introduces new competitors in the retailing landscape. Accordingly, the growing opportunities to meet new customers and the relatively lower consumer loyalty lead retailers to create playful, enjoyable and fun shopping experiences to stand out from the competition. Therefore, traditional retailers ought

**Table 3** Indirect effects

	Factor loading	T value	p value	95% confidence interval	Mediation
Quality → Satisfaction → Loyalty	0.313	7.445	0.000	[0.235:0.400]	Yes
Presentation → Satisfaction → Loyalty	0.014	0.538	0.591	[-0.037:0.066]	No
Price → Satisfaction → Loyalty	0.071	2.458	0.014	[0.016:0.130]	Yes
Quality → Enjoyment → Loyalty	0.106	3.465	0.001	[0.052:0.172]	Yes
Presentation → Enjoyment → Loyalty	0.026	1.211	0.226	[-0.015:0.070]	No
Price → Enjoyment → Loyalty	0.102	3.483	0.000	[0.050:0.164]	Yes

to acquire the skills typical of the travel sectors and, conversely, service area operators should improve their skills in managing groceries. In the next few years we might expect a growing cooperation between travel operators, manufacturers and retailers.

Due to the hyper-competitiveness of Italian MSAs (located close to each other compared to those in other European countries), the development of a genuinely loyal approach is imperative. In this vein, our paper empirically analyses that the overall perception of the assortment plays a strategic role in “*mobile*” customer loyalty. A consistently high-quality assortment, even if limited in depth, made up of excellent and reliable products decisively contributes to providing a satisfying and enjoyable shopping experience—which also positively influences customer loyalty, satisfying customers’ needs of time-saving and reducing their efforts and search costs. It is likely that due to the convenience in shopping, “*mobile*” consumers mainly evaluate value for money and the price range. We thus recommend managers operating in both the traditional retailing sector, as well as in the emerging hybrid retail formats, to carefully consider policies to improve shopping satisfaction and enjoyment. In fact, the more the sector becomes fragmented, the greater the need for retailers to increase the relationship with their customers. In particular, assortment presentation in MSAs’ stores seems to be underused in the creation of brand loyalty. In our opinion, this is probably due to the standardised layout proposed by MSAs. Accordingly, retailers should better handle products presentation and manage the merchandising in a different way to make the shopping experience more satisfying and enjoyable. Conversely, the products’ quality and price already have a substantial effect on shopping satisfaction and enjoyment. In the travel context, in fact, consumers do not evaluate the store offer in the same way as in the traditional grocery sector; they are willing to pay more for a high-quality offer.

Another important contribution of our research is that when consumers drive longer, for both personal or professional reasons, they show a higher level of brand loyalty to hybrid retailers. Indeed, the results show that the more kilometres the consumers drive on the motorway, the more likely they assess MSAs. Travellers are familiar with different shopping contexts and there is less suspense related to a new shopping context. From a theoretical perspective, we highlight the evolution of the relationship between the distance travelled to the store and the store choice.

## 6 Limitations and further research

Despite the main contributions that this paper provides, further research exploring the travel sector of grocery stores is required, above all considering the increasing number of partnerships revealed in recent years between service operators in the travel sector and retailers. Moreover, although in the Italian context the number of MSAs is double than in other European countries, our research also underline that the offer proposed by the operators can be very variable, i.e., some offer the cafeteria only, others operate as small shopping centres on the highway. In line with the main contribution of the literature, a more detailed analysis of the impact of the perceived value on loyalty is needed. Furthermore, this study does not explore

the impact of store image on brand loyalty to the retailer. According to Zeithaml (1988), consumers' evaluation of the market alternatives should expand the price-perceived quality relationship and its main antecedents might be studied. Moreover, this study is focused on a conceptualisation of brand loyalty as attitudinal. Future studies might also investigate the behavioural component of brand loyalty in the travel sector as a growing number of loyalty cards are emerging among MSAs' customers. A major investigation of travellers' perception, concerning the role of service providers of grocery goods in the motorway network would also be useful. This sector has been spreading very quickly in recent years and a greater impact of this sector on grocery retailing is expected. Moreover, it is interesting to understand how consumers perceived the extended MSAs assortment not only in terms of grocery products but also when the extension considers pharmaceutical or apparel products, among others. Likewise, further studies should consider the motivation of the trip as a variable to segment drivers between occasional and systematic travellers, adding some useful insights for scholars and managers. The study focuses on the MSA GAP; nevertheless, future studies should consider how the price and the service level of petrol stations can moderate consumers' loyalty to MSAs, as well as their attitude to the MSA store brand.

Finally, future research needs to gather data on the same set of relationships with identical users over several periods, to be able to include the dynamics of behaviour in consumer patronage. It would be useful to validate and generalise the results in future investigations. An important limitation of this study is also the result of the respondents' self-selection process. These problems are difficult to avoid in studies of "mobile" customers as, due to time constraints, drivers cannot be forced to fill out a survey questionnaire. Likewise, we must point out that all the respondents are Italian. While the sample size enables us to generalise, the results may not hold for other nationalities.

**Author contributions** FDC settled the introduction, designed and conducted the empirical analysis, developed the results and contributed to the writing up of the limitations (contribution: ca. 65%). MJS-F conducted the theoretical framework and contributed to the writing up of hypotheses (contribution: ca. 20%). EM developed the general discussion regarding the theoretical contributions and managerial implications (contribution: ca. 15%).

**Funding** No funding was received.

## Compliance with ethical standards

**Conflict of interest** All the authors declare that no conflict of interest exists.

**Ethical approval** All the procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Ethical standard** This article does not contain any studies with animals performed by any of the authors.

**Informed consent** Informed consent was obtained from all the individual participants included in the study.

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