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QSR brand value

Marketing mix dimensions among McDonald's, KFC, Burger King, Subway and Starbucks

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Abstract

Purpose – This study aims to examine the quick service restaurant (QSR) differentiation in the minds of consumers, customers and non-customers and addresses the use of absolute measures. The study integrated competitive context and customer vs non-customer perceptions to better understand marketing strategies and the impact on customer value.

Design/methodology/approach – A conceptual framework is provided with marketing strategy, 7Ps, value positioning and outcomes. A survey instrument to assess perceptions of QSR marketing mix dimensions and leading QSR brands as referents was used. The study used exploratory factor analysis, ANOVA and logistic regression to address research questions.

Findings – The five QSR brands were differentiated by three marketing mix dimensions: quality, convenience and price. Subway and Starbucks customers perceived higher quality than McDonald's and Burger King. Price separated Starbucks and McDonald's customers. Overall, QSR customers perceived higher quality and convenience than non-customers. Age group was a predictor of customer membership of QSR overall and McDonald's.

Research limitations/implications – The study used participants in Germany and had more respondents identified as McDonald's customers or referent.

Practical implications – The quality bundle represents unique resources for each QSR brand. Management teams should use a holistic mindset in considering the quality bundle reputation and how the various attributes support each other.

Originality/value – Consumers look to three factors for QSR rather than 7Ps: quality, convenience and price. Relative comparisons of perceptions among brands and between customers vs non-customers provided important contributions for QSR marketing mix factors.

Keywords Marketing mix, Starbucks, McDonald's, QSR, Relative measures, Value strategy

Paper type Research paper

Introduction

Brand evaluation's role in assisting consumers in making choices for initial and repeat purchases has a long history (Veloutsou, 2014). Tied to the notion of brands is the concept of value creation; value creation as a construct has had a longstanding association with both consumer needs and firm value strategies (Kim *et al.*, 2008). While a reciprocal connection between customer brand value and organizational brand value has been explicit in the literature (Veloutsou, 2014), relative measures in the context of chain restaurants has not

been articulated to date (Aksoy *et al.*, 2015). In the chain restaurant literature, recent research has measured customer satisfaction, loyalty and other measures by focusing on one brand (Lim and Loh, 2014), a case study (Jones *et al.*, 2002) or a generic assessment of restaurants (Parsa *et al.*, 2012), rather than considering competitors and how brands compare to each other. Further, little research has been completed comparing relative perceptions of regular customers vs non-customers. A greater understanding of these relative assessments has important implications for retention, new target markets and marketing effectiveness.

For consumers, value creation appears dependent on the needs of the individual and based on an assessment of a variety of firm aspects. Stahl *et al.* (2012) indicated that value created through brand assets was derived through four brand equity constructs termed differentiation, relevance, esteem and knowledge. This study asserts that the determination of value that a brand provides is driven by customer perceptions and by antecedent actions by firms in the form of strategies, resource allocations and a marketing mix that supports a brand's bundle of attributes and benefits.

These relationships appear to hold true in the context of quick service restaurants (QSR), with substantial research on the influence of various attributes on satisfaction, brand equity and loyalty (Lim and Loh, 2014), differentiation levels (Kim and Kim, 2004), restaurant selections (Parsa *et al.*, 2012), general branding (Jones *et al.*, 2002), to name a few. These areas of study provide guidance for the restaurant context and QSR but leave much to be desired for understanding the relative brand value across the QSR sector or perceptions by customers and non-customers. The current study contents that these issues posed in the QSR context provide opportunities for greater understanding of QSR industry characteristics compared to measurement using "absolute" approaches that lack referent perspectives.

This study addressed the following questions. First, how are QSR brands differentiated in the minds of consumers? While differentiation has a long history in marketing, it can become a double-edged sword. As firms become more distinctive, the target market becomes smaller, while the willingness to pay a premium by consumers that identify a fit with their needs increase (Stahl *et al.*, 2012). Thus, QSR differentiation in the minds of consumers has important implications for success. Second, do customers and non-customers perceive QSR differently? This question addresses a weakness in the literature as most research has focused on absolute measures of customer perceptions and satisfaction (Aksoy *et al.*, 2015). The relative nature of comparing regular QSR brand customers to non-customers has implications to improve understanding of marketing action plan impacts with its potential impact on customer acquisition and retention.

Literature review

QSR is a term used for a method of dining where the food is prepared and served quickly with a limited level of service. While QSRs have grown steadily, the segment has made headlines worldwide for health concerns and increased competition for the market leader McDonald's. In general, modern QSR is associated with US-based, global chains such as Burger King, McDonald's, Subway, Starbucks and KFC. Outside the USA, rapid growth has been observed mainly supported by a franchising business model with an increasing focus on positioning issues and the psychology dimension (Mathe-Soulek *et al.*, 2014).

Earlier research has considered quality aspects' (food, service and atmosphere quality) association with image, value, satisfaction and loyalty (Ryu *et al.*, 2012), as well as defined various factors associated with service quality (Tripathi and Dave, 2014) and attributes impacting restaurant selection decisions (Harrington *et al.*, 2013).

Robinson *et al.* (2005) reviewed if links existed between brand equity and satisfaction with loyalty and relationship marketing revealing a tenuous relationship in the QSR context.

Kim and Kim (2004) argued that the lack of differentiation of QSR products reduces brand commitment. Many studies indicated that QSR brands provide higher utility value to the customer and project a "high value image with low cost strategies to meet" consumer needs (Hu *et al.*, 2006, p. 116). Thus, the focus of QSR tends to be value and differentiate on price-value rather than quality.

Studies on QSR have also looked at key consumer groups and restaurant selection factors (Lim and Loh, 2014; Parsa *et al.*, 2012). Two studies have done comparative analysis (relative measures). Verma and Thompson (1996) used discrete choice analysis to reveal that price was, for three (of the four) pizza-delivery firms, the most important attribute. Mathe–Soulek *et al.* (2016) used comparative analysis of leading QSR and found new product development activities and promotions to have positive effects on firm growth, sales and stock prices.

In summary, while restaurants and QSR have been studied extensively, earlier studies provide equivocal evidence due to context differences, absolute measures and the fact that the industry and customers' expectations continuously evolve. Therefore, while determining exactly what the customer values in QSR would seem to be common sense, empirical research has not provided sufficient guidance on this important issue, particularly, in the wake of a variety of emerging trends and challenges such as concerns over the McDonaldization of the global food culture (Mak *et al.*, 2012), health concerns, minimum wage issues, local and fresh food movements and sustainability, to name a few. While recent studies have been undertaken to better understand the QSR setting (Ehsan, 2012; Parsa *et al.*, 2012 and others), it remains lacking in assessing relative differences in value strategies used by leading QSR in the marketplace.

Conceptual framework
To articulate relationships in the strategies of QSR, a conceptual framework is provided in Figure 1. This framework is based on a literature review and rooted in theoretical models of purchase behavior (Keller and Lehmann, 2006; Stahl *et al.*, 2012) and general models of strategy or marketing strategy (Hitt and Ireland, 2014). Moving from the left to the right, the model outlines the antecedents to marketing value strategies, the 7Ps of value strategy,
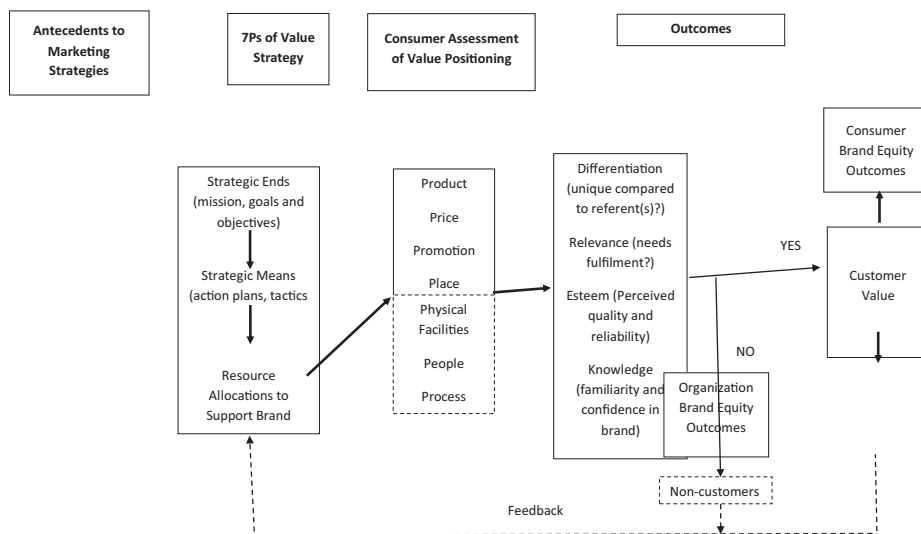

Figure 1.
Model of value-based strategies in QSR

consumer assessment of value positioning and outcomes for the consumer and organization. The following sections summarize these elements applied to the QSR context.

Marketing value strategies

The value a firm creates in the mind of the consumer has been touted as the key objective of an organization and as an antecedent for consumer satisfaction and loyalty, which drive firm performance, growth and long-term viability (Landroquez *et al.*, 2013). Therefore, it stands to reason that a firm's strategic ends, strategic means and resource allocations should co-align with value-creating attributes to achieve organizational success (Olsen *et al.*, 2008). As outlined in Figure 1, the antecedents to marketing value strategies include identifying what business the firm should be in (strategic ends), determining competitive methods or action plans for how these overall directions should be implemented (strategic means) and resource allocations to functional areas that support defined competitive methods which provide value to stakeholders. For study purposes, resource allocations are assumed to be tied to the marketing mix. While firm value is more quantifiable, the value for QSR consumers is more subjective and need or perception-based (Aksoy *et al.*, 2015).

While the concept of perceived value is not clearly defined (Sanchez and Iniesta, 2006), recent research and theory have defined two main types of values that allow firms to achieve competitive advantage: value creation and value appropriation. Value creation relates to firm activities that enhance consumers' valuation of benefits received during consumption. Value appropriation is often referred to as value capture and value realization regarding the firm's ability to appropriate rents or payments by consumers. Thus, it is argued that value creation and value appropriation together are needed to secure competitive advantage (Landroquez *et al.*, 2013).

Following these ideas, this study assumes that the concept of value creation and appropriation can create a restraining mechanism for imitation by competitors. Firm heterogeneity is a core assumption of the resource-based view of competitive advantage, but past research suggested the QSR sector was more homogeneous based on unit size, menu variety and following a predominately low-cost producer strategy (Harrington, 2001; Robinson *et al.*, 2005). The current QSR sector appears to have become more competitive and heterogeneous over the past decade, with the growth of quick casual concepts, the emergence of fast fine as a subgroup and greater ingredient consciousness worldwide (Baum and Whiteman, 2015). Therefore, an assessment of differences in QSR customer value profile was deemed as a missing link and critical in understanding sector leader success in today's competitive landscape.

Marketing mix

Once resource allocations for competitive methods are determined, these are generally thought to be implemented using marketing strategies known as the 7Ps. While the traditional marketing mix included four elements, services marketing has suggested an expanded list because of the more complicated and less standardized nature of services (Krasnikov *et al.*, 2009). Thus, the services marketing mix has been expanded to include three additional interactive elements (people, physical evidence, process). In the restaurant industry, the 7Ps have been used extensively (Knutson *et al.*, 1996) and appear to provide a detailed approach to conceptualize the bundle of marketing elements.

Recent evidence indicated that managing the more interactive elements of the marketing mix is of greater importance for services (Kushwaha and Agrawal, 2015). While QSRs appear relatively product-focused, all hospitality services appear to require high levels of interpersonal service, high visibility of output and a service environment as a key component (Ottenbacher *et al.*, 2009). Given the nature of hospitality services, it stands to reason that the

interactive elements should be prominent components marketing strategies and value assessment.

Earlier research provided initial guidance on the role of many of the 7Ps in the QSR context for behavioral intentions. When assessing factors impacting QSR selection, Ehsan (2012) found differing factors affecting the customer experience, which then lead to selection or rejection of a QSR in the future. These included price, variety of food, promotional deals and timely service. The impact of these elements depended on the location and changed based on referent cities or locations. Three primary factors for QSR selection emerged – brand image of the restaurant, its environment and its location. Secondary-level factors included price, promotional deals and timely service. Ottenbacher and Harrington (2009) concentrated on the relationship between seven QSR attributes associated with perceived importance (setting, marketing, price and value indicators, dietary considerations, access issues and special promotion) and indicated there was no standard QSR methodology for achieving the goal of customer satisfaction in a QSR experience. Ha and Jang (2012) assessed connections with restaurant attributes and consumer variety-seeking traits to constructs of perceived quality, satisfaction and boredom. The results indicated that variety-seeking in a restaurant setting is significantly influenced by quality of the physical environment, boredom with the environment and boredom overall.

Recent QSR research highlights the impact of increased competition and greater diversity in service level, product type and quality than ever before. Successful QSR operation requires an understanding of effective interactive marketing mix elements as well as more traditional product-based elements. In this context, people are an important element; QSR customer satisfaction based on appropriate staff behavior – together with the contribution of the customer as a partial employee appear key for leading a successful business. But, QSR product is also important and takes the form of quality, value, variety and taste (Hooi, 2012).

Additional Ps also appear to be important elements in the QSR marketing mix. "Place" relates to figuring out where to put the physical store; it is of special importance to QSRs because of the need for being accessible. "Promotion" has also been described as essential to catch the customers' awareness, enhance satisfaction and retain their loyalty (Hooi, 2012). While the role of "price" in the limited service sector varies (with the growth of fast causal, fast fine and gastro-fast concepts), it needs to provide sufficient value regardless of segment or target market. Nusair et al. (2010, p. 828) indicated that a lack of price reductions at "low-end service firms" may not lead to positive word of mouth, value or purchase intentions.

Earlier findings highlight the impact of consumer characteristics on selection, values and retention. QSR must identify target market characteristics, areas of differentiation, positioning and communication strategies. In total, the actions of QSRs must communicate their specific positioning. Ultimately, these actions are showcased in the people they hire, the product they serve, the price they charge and the discounts they provide as well as the place and promotions they choose and finally, the processes they put in place (Hooi, 2012). Based on a variety of research streams, findings indicated several impacts of value-adding strategies on satisfaction, loyalty and QSR selection. These value strategies of firms are implicitly or explicitly implemented by QSR firms; consumer perceptions of these relationships might be more clearly articulated utilizing a QSR specific framework.

Brand equity

Branding appears critical in services and especially noticeable in the QSR industry where McDonald's, Starbucks and Subway are among the 100 most valuable brands in the world (Forbes, 2015). Strong QSR brands impact consumer choices on where to eat out, providing assurance on quality of food, service, pricing and standards (Mintel, 1997). Using a case

study approach, Jones *et al.* (2002) found that McDonald's, KFC and Burger King had created strong and distinct brand images in the UK. While McDonald's was associated with both product and service, KFC and Burger King tended to be more product- than service-based. McDonald's was expressed as the hallmark for consistency of product quality, restaurant environment and service experience. Burger King was also viewed to be consistent but less favorable on product, environment and service, while KFC was regarded as having inconsistencies in service. For all three brands, respondents to this case study perceived staff behavior as consistent but associated negatively due to following a script, rather than addressing each guest's needs. The brands were perceived providing value by "doing things right for the customers", "monetary value" and by serving a "wider role within the community" (Jones *et al.*, 2002, p. 47). With this said, weaknesses of the study include an earlier timeframe, used a case study approach and was limited to three QSR firms.

Several terms associated with branding have been established, including brand knowledge, brand equity, brand awareness and image (Aaker, 2004) and brand loyalty (Kim *et al.*, 2008), to name a few. The basic concept of branding for service firms provides customers with greater trust for what is largely an invisible purchase (Mintel, 1997). Thus, a primary aspect to building restaurant brand equity is to ensure a good awareness of the brand with positive images in mind. Brand equity has been defined as containing both brand value and brand meaning (Blackstone, 1995).

As shown in Figure 1, the outcomes in this framework relate to the brand equity-derived value. It is useful to note that customer brand equity and organizational brand equity seem to have been conveniently separated into separate issues for academic measurement purposes, but in reality, these may be two sides of the same brand equity coin. A simple way to separate a customer brand equity concept from an organizational one is to think of customer brand equity as related more closely to traditional notions of market communication and the consumer experience, whereas organizational brand equity may be more closely related to managerial decision-making to maximize firm value. Brand equity is produced when foodservice firms deliver quality services associated through a communicated brand. The brand equity concept is generally applied to represent a relationship between the firm and the consumer to enhance firm competitiveness and create lasting value in the eyes of the consumer (Aaker, 2011). Implicit in the framework is the notion that the consumer assessment of value positioning leads to consumers becoming or remaining as loyal customers vs non-customers; this dichotomy addresses a weaknesses in the literature that rarely compares perceptions of non-customers to regular customers.

Consumer value

Ha and Jang (2012) examined the primary restaurant segments; accordingly, value represents a consumer's wanted end objectives in a consumption experience and is one of the most crucial predictors of satisfaction and consumption behaviors. Stahl *et al.* (2012) suggested four "pillars" used by consumers to assess value-based, brand equity concepts. These pillars are shown in Figure 1 and include differentiation, relevance, esteem and knowledge. Differentiation is the "extent to which the brand is seen as different, unique, or distinct" (Stahl *et al.*, 2012, p. 45). The second pillar is relevance addresses to what extent a brand meets the consumer's relevant needs. The esteem pillar relates to a consumer's regard for a brand's quality, reliability, consistency and whether or not a leader in the sector. Finally, the knowledge pillar taps into earlier constructs such as brand awareness as a key value and brand equity driver.

In restaurants, consumers have various reasons for dining out with a hierarchy value framework where each individual determines the most important attribute(s) to reach the

end goal. Besides satisfaction, the QSR consumer looks for convenience, efficiency, quality and social/emotional values. In contrast to the general consumer, these were the most highly ranked values for a QSR diner (Woodruff, 1997). Sahagun and Vasquez–Parraga (2014) questioned how QSR consumers become loyal, if at all. The findings indicated QSR customers are not genuinely loyal due to low-switching cost conditions, with loyalty being a second-order factor. Overall, the results indicated that satisfaction, trust and commitment provided powerful explanatory power for how QSR loyalty was established. Thus, as customer value is a precondition for customer satisfaction, and satisfaction is held to be precondition for customer loyalty, without customer value – firms will find it hard to achieve customer loyalty.

Relative measures
The literature has done extensive testing of value, satisfaction and loyalty but has generally found a weak relationship among these widely used constructs (Keiningham *et al.*, 2011). A critique by Aksoy *et al.* (2015) suggested that the difficulty of connecting measures of satisfaction, loyalty or brand equity measures to financial outcomes is in part due to the way these constructs are measured. Aksoy *et al.* (2015) argued that most studies use an absolute measure rather than a relative one. For example, customer satisfaction is generally assessed by asking customers the extent to which a brand meets their expectations with no control over referents customers use nor does it place the brand/firm in its competitive context. Several studies have shown the superiority of using relative metrics; while adoption has been slow, relationships between satisfaction, loyalty and outcomes have been shown to be different when absolute measures are used compared to relative measures (Aksoy *et al.*, 2015).

Overwhelmingly, research on QSR has relied on absolute metrics by looking at one firm/ brand (Lim and Loh, 2014) or used absolute approaches to generalize relationships across the restaurant sector (Ehsan, 2012; Parsa *et al.*, 2012; Tripathi and Dave, 2014). The few that used relative metrics used a specific sub-group (Verma and Thompson, 1996), topic (Mathe-Soulek *et al.*, 2016) or case study (Jones *et al.*, 2002).

The distinct differences between absolute vs relative metrics hold notable research and practical implications. The current study used relative methods to articulate relationships among marketing mix value perceptions across five global QSR and perceptions of customers vs non-customers. The brands of McDonald's, Burger King, Subway, KFC and Starbucks were used as the competitive landscape to assess each firm's standing in the minds of consumers. These brands were selected due to comparable brand awareness to consumers, but likely differing perceptions of quality and value. The study used a unique approach to assess the relative perceptions of regular customers vs non-customers. Following that brand perception is based on all consumers have "learned, felt, seen and heard" (Keller, 2008, p. 48), a better understanding of these perceptions by both customers and non-customers provides a metric to interpret differences in value perceptions.

Overall, the primary value of this study was the use of a relative metric approach to assess customer and non-customer perceptions of a QSR firm value based on the marketing mix, if value is based on a 7Ps model for QSR and if these elements vary by QSR brand. These relationships have important implications on QSR marketing strategies and outcomes. By its nature, service outcomes and experiences are highly subjective and contextual with the scientific community expressing difficulties in measuring service experiences of all types (McColl-Kennedy *et al.*, 2015).

Methodology

The survey instrument was developed after a review of the literature and construct definitions of the 7Ps. Each P is provided in Table I with items used to assess consumer perceptions. Survey items shown in Table I are how these items were phrased for identified QSR customers. A second measurement instrument was created for those identified as non-customers. For example, self-identified customers' question was phrased "The taste and variety of food and drinks is meeting my expectations", the phrasing for the same item for non-customers was "The taste and variety of food and drinks is not meeting my expectations". The process of completing the survey followed initially asking each participant if he/she is a regular consumer of QSR. If the participant was not, he/she would be given the non-customer questionnaire. If yes, he/she would be given the QSR customer questionnaire. For all participants, each P in the survey included two items and used a five-point scale ranging from strongly disagree (1) to strongly agree (5). Respondents provided gender, age group and dining frequency information.

For customers, the first part pertains to their most visited QSR (McDonald's, KFC, Burger King, Starbucks or Subway) and its use as a referent. For respondents identified as non-customers, they were invited to react to the 7Ps based on the agreement level using one of the five QSR that they were most familiar as a reverent. The sample was divided into two groups; the sample included 380 defined as regular QSR customers and 524 as non-QSR customers ($N = 904$). Because of incomplete information, the usable sample was 349 QSR customers and 486 non-customers ($N = 835$).

A face-to-face survey was conducted; before starting the survey, pilot tests were conducted to ensure understandability, readability and convenience. Based on these tests, the questionnaire received minor revisions and was loaded onto tablets for distribution. Respondents were derived using a stratified convenience sample. This method was selected to provide access to useful data and information that would be limited using probability sampling techniques. To minimize potential bias, the data collection varied in location (city size and locations), time of day, day of the week, time of year and proportional age groups. Respondents were surveyed in three city size locations: medium (minimum 100,000

	Mean (SD)				
Item	QSR customer	Non-customer	Quality	Convenience	Price
QualFactor Mean	*3.43 (0.74)*	*3.02 (0.77)*			
Product: Taste and variety of food and drink	3.58 (0.95)	2.95 (1.11)	*0.61*		
People: Staff is very competent	3.22 (1.05)	2.94 (1.01)	*0.74*		
People: Staff is very friendly	3.44 (1.05)	2.78 (1.00)	*0.70*		
Physical facilities: Environment is welcoming and pleasant	3.42 (0.99)	3.19 (1.10)	*0.79*		
Physical facilities: Standards (brand) make you feel comfortable	3.46 (1.02)	3.23 (1.07)	*0.76*		
ConvFactor Mean	*3.91 (0.67)*	*2.30 (0.69)*			
Place: QSR is easy to reach	4.28 (0.88)	1.86 (0.94)		*0.83*	
Place: Parking space is always available	3.52 (1.17)	2.43 (1.10)		*0.76*	
Process: The process is very fast	3.94 (0.91)	2.60 (1.02)		*0.73*	
PriceFactor Mean	*3.11 (0.97)*	*3.32 (0.98)*			
Price: Menu prices are inexpensive	3.19 (1.15)	3.32 (1.18)			*0.86*
Price: Less than competitors	3.03 (1.13)	3.31 (1.03)			*0.87*

Table I.
Principle components results for QSR dimensions

residents), medium-large (minimum 500,000) and large (minimum 1 million) cities in Southern Germany.

The sample included 58.2 per cent non-customers and 41.8 per cent customers; gender included 39.2 per cent male and 60.8 per cent female. Respondents were from five age groups: 20.8 per cent aged under 18 years, 52.6 per cent aged 18-29 years, 11.6 per cent aged 30-45 years, 10.8 per cent aged 46-55 years and 4.2 per cent aged 56+ years. Respondents were asked to use one of the five QSRs as a referent. 57.4 per cent used McDonald's, 5.6 per cent KFC, 13.1 per cent Starbucks, 14.3 per cent Burger King and 9.6 per cent Subway. Those defined as regular QSR customers also provided dining frequency: 36.3 per cent once a month, 49.0 per cent twice or thrice a month, 10.1 per cent once a week and 4.6 per cent more than once a week.

The five QSRs were selected by virtue of their reputation as top-selling QSRs worldwide. McDonald's, Burger King, Subway, KFC and Starbucks are ranked among the Top Ten of QSRs and having the highest sales in Germany (DEHOGA, 2015). Furthermore, each of these restaurants has international market success, are valuable QSRs and have the highest brand equities (Brown, 2015).

Data analysis
To assess the research questions, ANOVA and logistic regression (LR) were used. The concept and constructs associated with the marketing mix are well established in the literature (Krasnikov *et al.*, 2009), with strong face validity. The observable variables used as indicators of these latent variables are less clearly defined. Therefore, several methods were performed to determine construct validity. Construct validity was examined through indicators of convergent and discriminant validity (Kushwaha and Agrawal, 2015). For convergent validity, the study followed Lin and Ding (2006) with the examination of factor loadings and the AVE (both greater than 0.50). Fornell and Larcker (1981) criterion was used to assess discriminant validity; for this test, the square root of the AVE needed to exceed the correlations with all other constructs.

While the 7Ps has been well established, it remains unclear whether these QSR marketing mix elements are perceived as relatively orthogonal to consumers. Principle components analysis was run to determine dimensions of the QSR 7Ps across QSR consumers and non-consumers. The original list of 14 items was reduced to 10 items that provided clean loadings resulting in three extracted factors (Table I). Factor extraction was based on clean loadings, eigenvalues > 1, scree plot inspection, varimax rotation and conceptual sense of the final solution. The constructs captured in each dimension included a quality factor, convenience factor and price factor. The quality factor appeared to support earlier research, suggesting the concept of restaurant quality is tied to three main areas: food and drink, service and atmosphere (Ryu *et al.*, 2012). Similarly, consumers appeared to tie the elements of product, people and physical facilities as a quality bundle. The second construct was tied to the notion of convenience; this encompassed the speed of service (process) and ease of access (place). This construct appears to be similar to earlier studies that indicated convenience and efficiency are associated with QSR satisfaction and loyalty (Woodruff, 1997). The third construct was tied to price based on perception of relatively inexpensive menu items and compared to the competition. This price factor also is supported by earlier findings indicating price as an important QSR factor (Ehsan, 2012).

The resulting three-factor model explained a cumulative 63.19 per cent of the variance. The quality factor included five items and explained 33.11 per cent. The convenience factor included three items and explained 16.79 per cent. The price factor included two items and explained 13.29 per cent. The values for each factor were calculated as the arithmetic mean of

the items in each factor (Brechan, 2006). The Cronbach's alpha scores for all three factors provided satisfactory results based on conventional norms. The quality factor had a score of 0.79, the convenience factor had a score of 0.71 and the price factor 0.68. These scores were over the conventional cutoff in exploratory research of 0.60 (Hair *et al.*, 1998). Given scale length and anticipated differences between regular QSR customers and non-customers, these scores provide good evidence of internal consistency.

Table I provides the mean and standard deviation by each item and factor. QSR averaged higher responses for quality and convenience for customers vs non-customers (3.43 vs 3.02 and 3.91 vs 2.30, respectively). The price factor rating was lower for QSR customers compared to non-customers (3.11 vs 3.32). Table II provides correlations among the resulting marketing mix factors, the demographic information (gender, age group and dining frequency) and square root of the AVE of each construct. These correlations and AVE calculations exceed accepted standards indicating good discriminant validity (Fornell and Larcker, 1981). As a whole, these values indicated the three-factor model reflected good construct validity and reliability.

Results

Group: QSR type for QSR consumers
This test addressed whether QSR consumers differed in perceptions of value (quality, convenience and price) across brands: Do QSR customers' view their chosen QSR to be differentiated by the marketing mix? ANOVA was used with QSR brand membership as the predictor and marketing mix factors as criterion. Three ANOVA tests were run to assess differences among QSR brand customers on the quality, convenience and price factors (Table III).

The Quality factor was highly significant, indicating differences in quality perceptions by QSR brand. Tukey's *post hoc* tests indicated three significant differences: McDonald's customers perceived overall quality as lower than Starbucks (mean difference = -0.39; $p = 0.03$); McDonald's customers perceived overall quality as lower than Subway (mean difference = -0.37; $p = 0.04$); and Burger King customers perceived overall quality as lower than Starbucks (mean difference = -0.39; $p = 0.09$).

The Convenience factor was significant at $p = 0.06$, and *post hoc* tests indicated one significant difference: Burger King customers perceived overall convenience as higher than Starbucks (mean difference = 0.41; $p = 0.03$). The Price factor was non-significant.

Group: QSR customers vs non-customers
This test assessed – Are there specific marketing mix factors or demographic attributes that impact customers (or non-customers) to participate in the sector? For this analysis, binary LR

Constructs	Gender	Age	Dining frequency	Quality factor	Convenience factor	Price factor
Gender	0.81[a]					
Age	–0.04	0.84[a]				
Dining frequency	–0.02	–0.07	0.76[a]			
Quality factor	–0.01	–0.02	–0.01	0.76[a]		
Convenience factor	–0.08*	–0.21**	0.05	0.38**	0.79[a]	
Price factor	–0.01	0.10**	0.07	0.16**	0.02	0.71[a]

Table II.
Discriminant validity of latent variables

Notes: Diagonal elements are square root of AVE; off-diagonal are the correlations between constructs; *$p < 0.05$; **$p < 0.01$

Quality factor	df	Mean square	F	Sigma	Partial Eta Sq.
Between subject effects	4	2.36	4.43	0.002	0.05
QSR brand differences		Mean difference	SE	Sigma	
McDonald's	Starbucks	−0.39	0.14	0.03	
McDonald's	Subway	−0.37	0.13	0.04	
Burger King	Starbucks	−0.39	0.16	0.09	
Convenience factor	df	Mean square	F	Sigma	Partial Eta sqaure
Between subject effects	4	0.99	2.28	0.06	0.03
QSR brand differences		Mean difference	SE	Sigma	
Burger King	Starbucks	0.41	0.14	0.03	
Price factor	df	Mean square	F	Sigma	Partial Eta square
Between subject effects	4	0.87	0.48	NS	0.01

Table III.
ANOVA and *post hoc* results among QSR marketing mix factors

was used to test a model that predicts whether an individual can be accurately classified as a QSR customer or non-customer; tests assessed the impact of marketing mix factors and demographics on classification. It is used when the dependent variable (DV) is dichotomous and as an alternative to discriminant analysis with fewer assumptions. LR uses easily interpretable odds ratios and is not generally impacted by unequal cell sizes (King and Zeng, 2001).

Because classification tables of a sample can be too optimistic, a validation subset was created to assess whether the overall model appears correct and to enhance external validity. Following King and Zeng (2001), a random subset was generated using Bernoulli variates and a probability parameter of 0.70, creating a randomly generated sample of QSR customers and non-customers using 70 per cent of each sample. The remaining holdout sample was used to confirm the model. Stepwise regression was used to include only predictor variables that add significant predictability to the model. Forward selection was run first; then backward elimination was performed to confirm the result.

The overall model was confirmed as correct when comparing the analysis samples to the holdout samples. For the analysis sample, non-customers were correctly classified 91.9 per cent of the time and QSR customers 88.6 per cent. This classification was similar to the holdout sample with 93.6 per cent of non-customers and 85.6 per cent of customers correctly classified supporting the overall LR model.

Fourteen cases from the sample were removed due to missing data; 580 were included in the analysis and 241 used to validate in a holdout sample. In the analysis sample, 334 indicated they were non-customers and 246 indicated they were regular QSR customers. The model χ^2 was 500.88 with significance of level of $p > 0.000$, indicating the null hypothesis was rejected; thus, the model with the included independent variables did a better job than the constant term alone (De La Viña and Ford, 2001).

The predictor variables that were included in the final model were statistically significant at $p > 0.05$. These included age group, convenience factor and price factors as predictors of classification as a customer or non-customer. For LR, a puesdo R^2 is created to estimate the proportion of variance explained. For interpretation, the Nagelkerke R^2 uses an approach to adjust the range of variance explained from 0 to 1. For this model, the R^2 value was 0.78, indicating 78 per cent of variance was explained (Nagelkerke, 1991). The meaning of the coefficient (B) is not as clear-cut as with linear regression. The Exp(B) is easier to interpret; the dependent variable in LR is the logarithm of the odds of an event happening with a 1-unit

change in a predictor variable when the effects of the other model variables are controlled (De La Viña and Ford, 2001). This "odds ratio" is provided in the far right column of Table IV.

In terms of age, younger participants have higher odds of being QSR consumers than older. The convenience factor had the strongest odds of impacting QSR consumers; as convenience increased by one unit, the odds of being a QSR customer was 26.75 times greater. Interestingly, the negative sign of the price factor coefficient indicated an increase in agreement with the price attributes (inexpensive and prices compared to competition) – respondents decreased the odds of being a QSR customer but only by 0.55 probability.

Group: customers vs non-customers by brand

To assess perceived differences inter-brand for QSR, a second set of LR tests were performed based on the perceptions of the five QSR assessing – When customers and non-customers have the same referent, which variables predict group membership for a particular QSR? For each test, membership as a QSR customer vs non-customer was used as the DV with results in Table V. As with the overall analysis, tests used an analysis and holdout sample to verify results. To minimize redundant written explanation, Table V includes analysis sample n, holdout sample n, χ^2, and Nagelkerke R^2 values for each QSR brand test.

McDonald's customers vs non-customers

McDonald's had the largest sample using it as a referent ($N = 478$); the model χ^2 was 310.78 with significance of $p > 0.000$, indicating the null hypothesis was rejected. As with the overall QSR model, the significant predictor variables included age group, convenience factor and price factors as predictors of classification as a McDonald's customer or non-customer. The R^2 value indicated 82 per cent of variance was explained.

Younger members of the sample have higher odds of being McDonald's consumers than older consumers (0.53 times higher). The convenience factor had the strongest odds of impacting McDonald's consumers and was even stronger than the overall QSR consumer. As the convenience attributes increased by one unit of perceived value, the odds of being a McDonald's customer was 47.32 times greater. As with the overall LR, the negative sign of the price factor coefficient indicated non-customers were less price sensitive where an increase in agreement with the price attributes decreased the odds of being a McDonald's customer by 0.53 probability.

The McDonald's model was confirmed as correct when comparing the selected cases (analysis sample) and unselected cases (holdout sample) classification of McDonald's customers and non-customers.

KFC customers vs non-customers

The model χ^2 was 21.11 for the KFC sample with significance of $p > 0.000$, indicating the analysis model did a better job than the constant alone. In contrast to the overall

Variable	Coefficient estimate	SE	Wald	Sigma	Odds ratio
Dependent QSR/NON					
Intercept	–7.38	0.91	66.12	0.000	0.001
Independent					
AgeGroup	–0.66	0.17	15.80	0.000	0.52
ConvFactor	3.29	0.27	144.65	0.000	26.75
PriceFactor	–0.59	0.17	12.28	0.000	0.55

Table IV.
LR results for QSR or non-customer membership

Variable	Coefficient estimate	SE	Wald	Sigma	Odds ratio	χ^2	R^{2a}	Analysis n[b]	Holdout n
McDonald's									
Dependent QSR/NON									
Intercept	–8.14	1.28	40.71	0.000	0.000	310.78	0.82	328	142
Independent									
Age Group	–0.63	0.24	7.02	0.008	0.53				
ConvFactor	3.86	0.45	73.08	0.000	47.32				
PriceFactor	–0.81	0.25	10.75	0.001	0.45				
KFC									
Dependent QSR/NON									
Intercept	–8.46	2.98	8.07	0.005	0.000	21.11	0.67	30	16
Independent									
ConvFactor	2.80	1.01	7.78	0.005	16.48				
Starbucks									
Dependent QSR/NON									
Intercept	–5.65	1.78	10.10	0.001	0.004	47.11	0.67	72	34
Independent									
ConvFactor	2.79	0.65	18.38	0.000	16.26				
PriceFactor	–1.20	0.46	6.88	0.009	0.30				
Burger King									
Dependent QSR/NON									
Intercept	–18.09	6.33	8.16	0.004	0.000	94.21	0.92	80	39
Independent									
QualFac	–2.78	1.27	4.83	0.03	0.06				
ConvFactor	8.40	2.73	9.44	0.002	4,424.08				
Subway									
Dependent QSR/NON									
Intercept	–8.68	2.35	13.63	0.000	0.000	36.6	0.65	55	25
Independent									
ConvFactor	2.60	0.68	14.52	0.000	13.48				

Notes: [a] R^2 = Nagelkerke R^2 value; [b] The overall correct classification of customers vs non-customers is as follows: McDonald's (91.5% analysis, 89.8% holdout), KFC (93.3% analysis, 81.3% holdout), Starbucks (86.1% analysis, 81.8% holdout), Burger King (96.3% analysis, 84.6% holdout), Subway (83.6% analysis, 88% holdout)

Table V.
LR results for QSR or non-customer membership by brand

model, the sole significant predictor variable was the convenience factor for KFC. Even with convenience as a sole predictor, 67 per cent of variance was explained in the model.

The convenience factor was significant at $p = 0.005$ and positive; as the convenience factor attributes increased in perceived value, the odds of being a KFC customer was 16.48 times greater. The KFC model was confirmed as correct when comparing the selected cases and unselected cases. For the analysis sample, non-customers were correctly classified 100 per cent of the time and KFC customers 86.7 per cent (93.3 per cent overall). This classification was higher than the holdout sample with 90.9 per cent of non-customers and 60 per cent of customers correctly classified (81.3 per cent overall).

Starbucks customers vs non-customers
The Starbucks analysis sample included 48 non-customers and 24 regular Starbucks customers. The model χ^2 was 47.11 with significance of $p > 0.000$. For Starbucks-referent consumers, the convenience and price factors provided significant predictors of Starbucks customers or non-customers. The Nagelkerke R^2 value indicated 67 per cent of variance was explained.

The convenience factor was positive and significant at $p > 0.000$; as the convenience factor attributes increased, the odds of being a Starbucks customer was 16.26 times greater. The negative sign of the price factor coefficient indicated non-customers were less price sensitive ($p = 0.009$); an increase in agreement with the price attributes decreased the odds of being a Starbucks customer by 0.30 probability. Further, the Starbucks model was confirmed as correct when comparing the selected cases and unselected cases with 86.1 and 81.8 per cent overall correct classifications, respectively.

Burger King customers vs non-customers
For the Burger King referents, the quality and convenience factors provided significant predictors of Burger King customer or non-customer membership, explaining 92.3 per cent of the variance. The model χ^2 was 94.21 with significance $p > 0.000$. The convenience factor was significant at $p = 0.002$ and positive; the odds of being a Burger King customer was more than 4,424 times greater when the convenience factor increased by one unit. The negative sign of the quality factor coefficient indicated non-customers rated the quality higher than regular customers; an increase in agreement with the quality attributes decreased the odds of being a Burger King customer by 0.06 probability. The Burger King model was confirmed with high correct classifications for both the analysis and holdout samples (96.3 and 84.6 per cent overall).

Subway customers vs non-customers
For those using Subway as a referent, the convenience factor provided the sole significant predictor of customer membership; the R^2 value explained 64.9 per cent of the variance. The model χ^2 was 36.60 ($p > 0.000$) and the convenience factor was significant and positive ($p > 0.000$). As the convenience factor attributes increased, the odds of being a Subway customer was 13.48 times greater for each unit increase. Finally, the Subway model was confirmed when comparing the classification of selected cases and unselected cases. For the analysis sample, correct classification with 83.6 per cent overall compared to 88 per cent overall for the holdout sample.

Discussion and conclusions
This study makes four main contributions by testing the following:

(1) How are QSR brands differentiated by today's consumers?

(2) Is this differentiation based on the established 7Ps model or some variation?

(3) Is this differentiation perceived differently by QSR regulars vs non-customers?

(4) Are results more valid using relative measures vs more conventional absolute approaches?

The findings supported the idea that consumers believe leading QSR brands are differentiated on several aspects. Across QSR brand customers, we found that Subway and Starbucks customers felt that these brands created greater value in quality elements compared to McDonald's and Burger King. This appears to fit with the fresh and made to order feel of Starbucks and Subway compared to the more traditional QSR methods of

McDonald's and Burger King. Interestingly, price was viewed as higher by Starbucks compared to Burger King, but no significant differences among other brand comparisons. This finding may be in part due to the wording of the questions and the competitive set the customers where comparing to the QSR referent. For example, perceptions of prices and prices relative to competitors may result in Starbucks customers comparing to other independent coffee houses rather than McCafé.

An important finding was that consumers appeared to view the marketing mix for QSR as three main dimensions: quality, convenience and price. While the marketing mix concepts have been proposed to form 4 to 7Ps, this separation appears to be more useful for marketing decision-making. Further, the QSR quality factor appeared to bundle together more tangible (product, physical facilities) and more intangible (people) elements by consumers.

When QSR customers of the five brands were combined and compared to all non-customers in the sample, QSR customers perceived the quality and convenience dimensions as providing higher value than did non-customers. When looking at the mean values within the quality dimension, these differences are apparent in the taste and variety of food and drink, the competence and friendliness perceptions of the staff and how comfortable and welcoming the facilities felt to the participants. In terms of convenience, access, parking and fast service were strong predictors of whether or not consumers were QSR customers. In fact, the convenience dimension provided the greatest odds for membership as a QSR customer or non-customer. The price dimension was also a predictor of membership but in the opposite direction – non-customers appeared to agree more strongly that the referent QSR had inexpensive prices and was priced less than competitors. This indicated that QSR customers may be more price sensitive, or because they participate in actual prices at their referent QSR more frequently, their perceptions of pricing were more critical.

Not surprisingly, younger consumers also had higher odds of being QSR customers. Using this analysis to assess consumers' value determination within the four pillars in Figure 1, it suggests that QSR customers use convenience as a key point of differentiation and relevance to meeting their needs. While quality elements did not have statistical significance, differences in responses between customers and non-customers indicate that customers view the quality elements as providing relevance and esteem in regards to quality and reliability. From a value perspective, it appears value appropriation by QSR from consumers is driven by convenience elements with a need to provide sufficient quality in product, people and physical environment.

To drill down a little farther when comparing QSR customers vs non-customers, each QSR brand was differentiated between customers and non-customers by convenience, but some brands had other dimensions that were relevant. Price was also a point of differentiation for McDonald's and Starbucks consumers. Perceptions of quality impacted the whether or not Burger King's consumers were regular customers or not. Age group appeared to be an important driver for McDonald's consumers but not for the other QSR brands.

Theoretical implications
Figure 1 provides a theoretical framework of the flow of decision-making starting from organizational decisions (strategic planning to resource allocations for the 7Ps) to consumers' decisions based on Stahl *et al.*'s (2012) four pillars of brand equity. In the context of QSR, this framework should be revised to reflect the 3Ps used as primary determinates of both QSR customers and non-customers.

Due to the nature of QSR, it appears consumers look to three factors for QSR purchases:

(1) a perceived quality bundle;

(2) convenience; and

(3) price.

In contrast to earlier research in restaurants and service marketing, the quality factor is a leading element, but it includes both tangible and intangible elements that combine consumer perception of quality based on product, people and place. The addition of people to this bundle certainly makes sense from ideas of the experience economy and service co-creation, but expands perceived quality from traditional restaurant studies using food, service and atmosphere as mutually exclusive elements of quality. This finding in the QSR sector also supports the notion of the RBV where competitive advantage is based on a unique bundle of resources rather than the assumption of a relatively homogeneous QSR sector. The quality factor should also be proposed as a key driver of brand equity pillars of differentiation and esteem, but it remains a theoretical question which QSR quality elements are "must-be", one-dimensional, or excitement attributes (Mathe-Soulek *et al.*, 2015).

The convenience factor includes location aspects such as parking and access but also the service delivery process and whether or not it is fast and effective. This factor is proposed to be most closely tied to the evaluation pillar of relevance, as it relates to needs fulfillment but could also relate to esteem (reliable) and knowledge (confidence in brand service delivery). Finally, price was shown to be the third factor used to determine customer membership. While QSRs have been considered as using primarily a low-cost producer strategy, perceptions of inexpensive food and beverage and prices relative to the competitive set appear to be important drivers for consumers. It is proposed that this factor also relates to esteem (reliable value) and knowledge (confidence in brand price/value) for consumer decisions. Additionally, with growing diversity in the QSR sector, the QSR 3Ps should be assessed in a framework of subgroups such as traditional QSR, quick casual, fast fine, etc. to ensure the correct competitive set is identified in the eyes of consumers and the relationship with how these subgroups are assessed for differentiation, relevance, esteem and knowledge.

From a methods standpoint, the findings in this study support the need to design research that allows relative measures instead of absolute ones. The concept of comparing perceptions of QSR between brands and between customers vs non-customers provided important contributions for meaningful marketing mix factors in QSR. It is further proposed that theoretical constructs should be tested using relative methods. For instance, the theoretical relationship between QSR attribute importance and performance should provide more valid findings than a simple absolute measure of attribute performance alone. The relative measure of the four pillar constructs comparing customers vs non-customers, different QSR sectors or other comparisons should allow for more valid tests of theoretical relationships.

Practical implications
For practitioners, the QSR three-factor marketing mix finding has important implications. A key driver of differentiation for QSR is the quality bundle. This bundle represents unique resources for each QSR brand that includes product, people skills and service, place and process. For marketing mix decisions, top management teams should think of the resource allocation process in a more holistic sense considering the unique quality bundle reputation of the firm and how the various elements support and enhance each other. These decisions should consider appeal to broad vs focused target markets to avoid creating a bundle that is merely "stuck in the middle", and determining how this unique bundle meets sector needs or

a segment with unmet supply. Practitioners should consider the double-edged sword of distinctness that may create a defined fit with consumer needs but may limit the market size of those willing to search out the brand or pay a premium for its services (Stahl *et al.*, 2012).

The finding of convenience as the second QSR factor ties the need to consider location access, parking, speed of service and other key place decisions. While not surprising, this has substantial implications for site selection and layout for consumer access and staff efficiency. Finally, the price factor instructs management teams to consider price decisions relative to competition and manage perceptions of price. This was particularly important for attracting non-customers. Further, the concept of "price" appears to be tied to relationships of price/value, price/quality, time savings, sustainability, health, etc. for regular customers and non-customers. Thus, practitioners should ask – What value do we provide to our target market and how does this fit with our price strategy?

Limitations and future research
This study provides insights into the QSR sector but has limitations. The study was completed based on participants in Germany. The sample had a greater number of respondents identified as McDonald's customers and using McDonald's as a referent; given a larger penetration in Germany, this does not appear to represent a bias sample. LR is not sensitive to cell size but the smaller samples of Starbucks, KFC, Burger King and Subway may have limited the ability to identify where these brands are differentiated (increasing the likelihood of Type II error).

This study used relative measures rather than absolute measures comparing perceptions of customers to non-customers and across QSR brands. Additional efforts should be done designing measurement instruments that delve deeper into these comparisons. For example, the quality of the people element in QSR is greatly impacted by the employee–customer interaction. To better assess people (and other quality indicators), the performance of a QSR firm's contact personnel should be assessed in the customers' mind and measured relative to the competitors contact personnel. As in the current study, this approach would go beyond informing the QSR if customers are satisfied but also provide insight into specific aspects of the service interaction that impact customer preference. Future research in categorizing QSR attributes using Kano *et al.*'s (1984) quality-satisfaction model would enhance understanding, but, methods should be developed to minimize weaknesses of using simplistic and absolute measures (Mathe-Soulek *et al.*, 2015) and, instead, integrate meaningful relative measures such as the relative relationships of importance–performance and expectations–performance on outcomes such as satisfaction, loyalty and recommendation behaviors.

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