Original Article

Exploring consumers' images of open restaurant kitchen design

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ABSTRACT In their ongoing search for competitive differentiation, restaurateurs are now turning to open kitchen design as a unique selling proposition. While many different elements can contribute to memorable dining experiences in hospitality scenarios, the open kitchen concept can not only provide entertainment in the form of the display of cooks' at work, but also 'transparency', that is, customers being able to see firsthand how food is handled. What images come to consumers' minds, however, when they think of an open restaurant kitchen? To date, contemporary research has to a large extent ignored this area that could potentially have several impacts on customers' consumption and patronage of restaurants and hotels. Gathering data from 277 regular restaurant customers, the present study explores their images of open restaurant kitchens. Overall, respondents' comments demonstrate their positive views about the open kitchen concept, including fun, entertainment, cleanliness, trust, and being able to see both the chefs (cooks) and the food being prepared. While clearly an open kitchen concept may not be appropriate, convenient or feasible in all hospitality scenarios, the findings suggest that many consumers do appreciate elements of the concept that can be experienced during the consumption of their meals. What may be even more important is the 'reassuring' aspect of how their food is being prepared, including cleanliness and hygienic measures.

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INTRODUCTION

As is the case of many industry sectors, during their quest for success, hospitality industry operators discover promising business opportunities but also face challenges, particularly given all the significant changes that are currently occurring in the 21st century. With regard to the changes, new trends in the hospitality world, as is the case of molecular gastronomy (This, 2005; Blanck, 2008), the use of genetically modified foods, the growing emphasis on the use of local produce or implementing 'greening', energy- and water-saving strategies (Hensley and Donohue, 2008) are shaping the present and future of the sector. In addition, trends in hospitality equipment and design (Stipanuk, 2006; GlobeNewswire, 2010), as well as consumer concerns, needs, wants and preferences (Kivela and Crotts, 2006) are having an impact on how operators run their business. Furthermore, in many instances, these environmental pressures are factors significantly dictating the way operations perform in terms of food preparation and delivery.

Increasing demands also underline the importance of space allocation (Ghiselli *et al*, 1998) and space optimisation. Moreover, these factors, which contribute to maximising productivity and minimising safety issues for both clients and restaurant personnel (Stipanuk, 2006), are vital in today's hospitality sector, including restaurant kitchens. The popularity of many of the world's cuisines, including ethnic foods that are now regular features in many Western nations, has increased chefs' motivation to incorporate or 'fuse' different food ingredients and produce. At the same time, these developments are contributing to absorbing new design ideas, concepts and themes. One concept that became popular in the 1990s (Baraban and Durocher, 2010), but largely used today among large and small restaurant operations is that of the open restaurant kitchen setting.

Despite this new influx of ideas, themes and concepts refreshing and injecting new life to the hospitality sector, very little is known, for instance, about areas related to open restaurant kitchens from an academic perspective. This dearth of knowledge is particularly true with regard to the positive and even negative views that kitchen/restaurant personnel, consumers and restaurateurs may have about the open restaurant kitchen concept. Only very recently has interest grown among researchers to study areas related to open kitchen design. For example, Chow *et al* (2010) investigated perceptions of cleanliness among restaurateurs concerning open versus closed kitchen design. These researchers found that operators viewed the open kitchen concept as overall conducive to more hygiene, and to positive behaviour among kitchen employees, as these might feel observed by customers. Clearly, open kitchen design can have several implications for consumers and the hospitality industry, and there is much merit in investigating this area further.

Against this background of so much potential but so little information, the present study investigates the open kitchen concept, exploring consumers' perceptions of this concept. Doing so, the study seeks to address the following fundamental question:

- What images come to mind immediately when consumers think of an open restaurant kitchen?

Consumers' views on the open kitchen concept could provide very valuable insights for the entire hospitality sector. For instance, added information that addresses the question above from consumers' perspective may be beneficial in establishing the degree of importance that consumer segments may place on the hygiene (cleanliness) and/or the 'entertainment' factor of open kitchens. At the same time, new knowledge could help identify whether consumers' images of open restaurant kitchens play any in their actual behaviour and/or choice of restaurants. New knowledge could therefore be used to improve many restaurants' marketing efforts, particularly among those consumer segments that may favour different kitchen design concepts (for example, open versus closed). Consumers' images may also identify their needs and wants regarding their dining experience, and how an open kitchen design may influence such experience, thereby driving repeat visitation and positive word of mouth for operators. Finally, new information on the open kitchen dimension could be of much use to government agencies, including health department officials and small hospitality business development officials in their efforts to improve the hospitality industry's standards and overall well-being.

LITERATURE REVIEW: RESTAURANT DESIGN AND THE OPEN KITCHEN CONCEPT

Globalisation efforts by governments, multinational corporations and other entities are having an enormous impact on many sectors, including the hospitality industry and the food delivery networks it relies upon, for example, the internationalisation of food company franchises and food-related trends (Park, 2004). Whether caused by globalisation or by long working hours and intensive family schedules (Klein *et al*, 2008), or both, in the case of the United States, there is clear evidence of consumers' strong preference for meals prepared outside their home. In 2000, Ebbin referred to a report by the National Restaurant Association to explain that, on average, people in the United States consumed 4.2 'commercially prepared' meals each week, or one-fifth of meals they consumed weekly. Later in 2008, Klein *et al* stated that 'The average consumer eats restaurant-prepared food at least five times each week' (p. 1). Given the scale of demand for restaurant-prepared foods, there are many opportunities but also pressures on restaurateurs to address consumers' expectations.

New added pressures have dramatically increased the level of complexity in the process restaurateurs go about to excel in providing a safe, pleasing and quality environment. In this endless quest, restaurateurs aim at drawing consumers and, whenever possible, encourage their return. However, this process is seldom smooth, and for a variety of reasons, many restaurateurs fail in addressing the most basic consumer expectations. For example, the occurrence of food poisoning cases, or the threat thereof, is affecting many restaurant operations, with resulting lawsuits and/or penalties (Bloom, 2009; Watford Observer, 2010). Food-borne illnesses affect millions of individuals (Wilcock *et al*, 2004). Each year in the United States alone, food-related illnesses affect approximately 76 million individuals, and as many as 5000 die because

of similar causes (Center for Science in the Public Interest, 2009). Moreover, much of the food-related illnesses originate from foods prepared in restaurants (Klein *et al.*, 2008). Consequently, it is not surprising that consumers' expectations of quality and safe foods have increased (Barber and Scarcelli, 2009, p. 309). Some studies also allude to the importance that customers place on cleanliness and hygiene, and trust in different areas of a restaurant operation (see, for example, Worsfold, 2006; Aksoydan, 2007). Unfortunately, given the many businesses that experience food safety and hygiene-related issues, providing a safe and healthy environment are core requirements that often become unfulfilled – even flatly ignored by some restaurateurs.

Safety and healthy environments are also closely associated with the way a restaurant is designed, particularly in areas such as a kitchen where employees prepare foods. On the one hand, designing a kitchen that enhances employees' safety is paramount. One potential issue that employees face is that, as Ghiselli *et al.* (1998) found, kitchens are increasingly being built smaller in size. Given this trend, proper kitchen design may prove decisive in preventing or discouraging such potentially dangerous situations such as 'cross-tracking' (Stipanuk, 2006), a 'positional situation' when employees are forced to cross paths. For instance, minimising cross-tracking could also decrease the likelihood of accidents between chefs carrying sharp, heavy or hot cooking tools and service staff carrying trays or even walking empty-handed. On the other hand, and apart from layout, efficiency of operation, equipment, lighting and other elements that contribute to maximising productivity while minimising accidents, stress and discomfort, kitchen design can also be conducive to employee hygiene. In fact, kitchen design can have '... positive influences on handwashing within the restaurant environment' (Pragle *et al.*, 2007, p. 29). More employee hand hygiene may lead to minimising the potential of food contamination, and consequently minimise the occurrence of harmful situations that could compromise an establishment's reputation.

In some hospitality environments, the importance and impact of dining room decor on a business's bottom line have been discussed (see, for example, Lambert and Marsh, 1984). In many instances, the aesthetic value of a service environment has been found to be very beneficial to the overall success of many businesses. Researchers have concluded that as services are largely intangible, customers may rely heavily on tangible cues from the more physical environment to compensate and create a representation of the quality of the service they receive (Bitner, 1992; Palmer and O'Neill, 2003). Researchers have also concluded that there is an integral correlation between the physical environment and overall satisfaction of the customer (Baker *et al.*, 1994; Henriksen *et al.*, 2007). The physical environment not only influences customers but also has a direct influence on employees' motivation to perform their jobs and duties at a high quality level. Put simply, the physical servicescape should cater simultaneously to the needs of the employees as well as the customers.

Similarly, recent reports underline the attractiveness – and therefore significance – that the building of an open kitchen concept has for

restaurants and other hospitality operations (Parmley, 2010; Weisstuch, 2010). Thus, whether fad or long-term business strategy, open kitchens seem to awaken much interest among certain consumer segments or at least many restaurateurs believe that such development is taking place. As Chow *et al* (2010) suggest, the growing popularity of television food programs, with chefs preparing meals almost constantly followed by filming crews may be contributing factors for some consumer segments to perceive open kitchen styles as entertaining, interesting and fun to watch. In turn, many consumers may wish to 'extend' the television experience to a real-world scenario, where they can, if at a very different level, observe the developments leading to the preparation of meals.

Recent news and reports demonstrate that many small hospitality businesses have adopted the open kitchen design concept (Bruni, 2005; Ferren, 2010; Virbila, 2010). This development is the more significant, as in the United States most eating and drinking businesses are small in size. In fact, 91 per cent have fewer than 50 employees and 70 per cent are single-unit operations (National Restaurant Association, 2009). Thus, knowledge of consumer images on open kitchen design could be of much benefit to small business operators. However, despite its apparent popularity, research conducted on the open restaurant kitchen concept is very limited. Given the existing knowledge gaps, the aim of the present study is to examine this dimension from consumers' perspectives.

METHODOLOGY

To gather consumer data for the present study, questionnaires were distributed at a university campus in the southern United States during the months of January through April of 2010. This particular setting (university environment) was chosen for a number of reasons. First, the opportunity and convenience of being able to collect data among large number of attendees to university sport events (college basketball) was believed to allow for a fast and high response rate. Second, the affluence to these sport events (for example, National Collegiate Athletic Association basketball home games) of different group of individuals from all age groups and both genders also provided a factor of convenience in collecting responses. In fact, having a pool of a more balanced age mix, for instance, was believed to allow for potentially making comparisons of respondents' answers. Third, that the study was to be conducted by a group of researchers of the same university where the questionnaire distribution took place was believed to be an additional motivation for some potential respondents. For example, old graduates or citizens of the same community in which the university is located might feel empathetic and willing to support the study.

The limited research conducted on consumers' images of open kitchen design influenced the structure, content and design of the questionnaire. Apart from the research question investigated, the questionnaire also sought to examine:

- demographic aspects of participating individuals, such as their gender;
- different aspects of consumers' dining experience, including

- frequency of restaurant patronage,
- type of restaurant frequented,
- factors driving consumers' choices of one restaurant over another, and
- how different restaurant design factors may affect their satisfaction.

Once the Institutional Review Board (IRB) approval from the researchers' university was obtained, the questionnaire was placed in an envelope that also contained one page that included:

- (a) a brief summary of the study's objectives;
- (b) a statement inviting respondents to participate in the study;
- (c) instructions on how to complete the questionnaire; and
- (d) a copy of IRB approval, documenting that the appropriate ethical procedures had been followed in the questionnaire design.

Before the basketball games, the potential respondents were approached, briefly introduced to the project's goals and invited to participate in completing the questionnaire provided and enclosed in an envelope. Each envelope was pre-paid (postage stamp on the envelope), and included the researcher's contact details and could be sealed upon completion and returned to the provided address. Doing so prevented the potential identification of any respondents, while allowing respondents to complete the questionnaire and mail it at their convenience. In total, 652 questionnaires were distributed during the basketball season (Spring 2010) and 278 were completed and returned to the researchers' university. During the process of analysing the data, it was noticed that one respondent indicated 'never' eating out. As the study's purpose was to collect information from individuals who patronised restaurants, this response was removed from the data analysis.

The total number of usable responses was therefore 277, an overall 42.5 per cent response rate. While clearly the number of responses obtained is by no means representative of the state where the data were collected or of the southern region, it was considered sufficient for the exploratory nature of the study.

The comments that respondents provided regarding their images of open restaurant kitchens were first entered in Microsoft Excel spread sheets, then grouped into different themes using content analysis and transferred into Microsoft Word. In addition, the Statistical Package for the Social Sciences was used to analyse respondents' demographic and other characteristics. Comments were labelled by the respondents, that is, Respondent 1's comment is labelled R1, Respondent 2's comment R2, and so forth.

FINDINGS

As Table 1 illustrates, females outnumbered males (175 versus 100), whereas in terms of age no particular group was clearly numerically dominant. However, it was noticed that just over half of respondents were 50 years old and above and that those between the ages of 30 and 39 constituted the smallest group (8.7 per cent). All but one respondent indicated eating out, with over 90 per cent doing so at least once a week,

Table 1: Basic respondent-related information

	<i>n</i>	%
<i>Gender</i>		
Females	175	63.2
Males	100	36.1
Missing responses	2	0.7
Total	277	100.0
<i>Age groups</i>		
21–29 years old	51	18.4
30–39 years old	24	8.7
40–49 years old	59	21.3
50–59 years old	76	27.4
60+ years old	67	24.2
Total	277	100.0
<i>Respondents' frequency of eating out</i>		
Daily	61	22.0
Once a week	196	70.8
Once a month	20	7.2
Total	277	100.0

suggesting that the large majority of respondents is regularly exposed to restaurant environments. At the same time, most respondents may be familiar with open/closed kitchen settings.

When asked to indicate what images come to their mind when they think of open restaurant kitchens, 208 (75.1 per cent) participants provided valid comments concerning this dimension, that is, comments that only indicated the name of a business without elaboration were not considered. Of the 208 comments, 76 were from males and 132 from females; thus a similar percentage of gender participation in terms of written comments (76.0 per cent versus 75.4 per cent) was achieved. A more in-depth analysis of the comments helped identify that 54 participants associated open restaurant kitchens with positive aspects, 29 with cleanliness and 37 with ethnic cuisine scenarios. In addition, 52 comments associated open kitchens with diverse themes, including interest and curiosity of seeing people (chefs) at work. Table 2 shows that only one respondent associated this concept with an unclean environment (R1, female): 'More spread of germs as patrons come in sick, coughing ...'. Although isolated, this comment may be reflective of environments where, because of insufficient ventilation, germs may travel freely and potentially contaminate chefs/cooks and service personnel. In contrast, from the 54 respondents whose comments denote positive aspects associated with open kitchen design, the element of adding value to the dining experience was clearly highlighted. In this context, the kitchen staff's professionalism, added to respondents' perceptions of quality provided, the entertainment 'factor', and that of 'transparency' in the way foods were being prepared were all referred to as very important:

R2 (female): 'A celebration of healthy, well prepared food for guests who appreciate educated, talented chefs'.

Table 2: Main themes that respondents identified concerning their images of open restaurant kitchens

Main themes	n	%
<i>Positive images</i> Examples: 'Romantic, fun, comforting, fresher foods, chefs are more self-conscious about food preparations, better foods, neat, feel better about preparation of food, enjoyable, lively, jovial, culturally rewarding, nice'.	54	19.5
<i>Images of diverse themes</i> Examples: 'Chefs wearing hats, entertainment, steakhouse, flames on grill, watching food being prepared, trendy approach, seeing the cooks'.	52	18.8
<i>Images of Japanese and other Asian cuisines</i> Examples: 'Japanese restaurant, sushi, Japanese food, Asian food Hibachi, Mikata, Shogun (local Japanese restaurant names), Chinese'.	37	13.4
<i>Images of cleanliness</i> Examples: 'Very clean, sanitation and safety, cleaner and better food, spotless, free to look in confidence of the restaurant, clean area, know what you are getting, food will be prepared in a clean environment by qualified chefs'.	29	10.5
<i>Negative images</i> Examples: 'Noise, distractive/distracting, crowded, loud, chaos with employees, clutter, not able to converse with people having dinner, less intimate'.	19	6.9
<i>Makes no difference to respondent</i> Examples: 'Not necessary to enjoy restaurant experience, never consider, I don't want to see stuff/food prepared, unimportant, no particular image, don't really care if [kitchen] is open or not'.	16	5.8
<i>Image of lack of cleanliness</i> Potential for spreading germs (patrons)	1	0.4
Total	208	75.1

R3 (female): 'I enjoy being able to see my food being prepared. I also like when the cooks are interactive, it makes for an enjoyable experience'.

R4 (female): 'A fun and entertaining restaurant. Even if I don't sit close to see, it adds to the ambience of the restaurant. It can bring up the personality...'

R5 (female): 'I enjoy being able to see my food being prepared. I also like when the cooks are interactive, it makes for an enjoyable experience'.

R6 (female): 'Seeing the chef organizing plates by grill and wondering how he knows which "steak" goes on which plate'.

R7 (female): 'The kitchen will be neat and organized. The chef and support staff will provide an element of entertainment'.

R8 (male): 'I do really like that environment and the entertainment of the chef preparing the food in front of me'.

R9 (male): '[The] chef and associates are more self-conscious about food preparation'.

R10 (male): 'Very upscale, very expensive and frequented by people of quality'.

As noticed above, more females than males provided the more elaborated positive comments. Similarly, females' comments appeared to be more critical among those 19 who thought of the open kitchen design concept in negative ways. In addition, the large majority of such comments were from females (16 versus 3). Overall, the main negative argument that participants made (13, 68.4 per cent) associated the open kitchen concept with noise. Some of the comments are in line with Rohrmann (2003) who found that the

sounds of clattering pots and pans in open kitchens constituted a source of high peak sounds. However, the central aspect related to noise is related to the potentially distracting factor of kitchen noise, which some respondents viewed as a deterrent from socialising, for instance, not being able to hold a conversation with the required quiet environment:

R11 (female): 'To me an open kitchen is much less intimate. An open kitchen creates noise and hustle ... not very good for someone who just left a noisy hectic workplace'.

R12 (female): 'Noisy. Open kitchen restaurants seem to be louder and less conducive to conversation in a normal tone'.

R13 (female): 'Kitchen and food preparations are visible; perhaps a cafeteria style service. This also lends itself to a noisy atmosphere!'

R14 (female): 'Usually louder, not able to converse with people having dinner with as much as [conversation] going on around table'.

R15 (male): 'A loud kitchen, lots of banging pots and pans'.

Table 2 also shows that 52 (18.8 per cent) participants associated an open restaurant kitchen concept with diverse themes that, in almost all cases, consisted of keywords (for example, 'fast food', 'show', 'open window', 'grilling meat', 'flames, grills, fryer', 'chefs with white hats on', 'steakhouse', 'aromas' or 'barbeque houses'. While arguably many respondents might not have been willing to make extensive comments, the fact that they only listed between one and three keywords to identify their image of open restaurant kitchen environments also suggests very limited knowledge or exposure to such environments.

Along similar lines, for 37 (13.4 per cent) respondents, the concept of an open kitchen evoked memories of ethnic/Asian restaurants, predominantly Japanese; a very similar percentage of males (14, 14.0 per cent) and females (23, 13.1 per cent) evoked such images (Table 2). This outcome may be related to the existing local restaurants in the university town where the study was conducted. Moreover, many respondents may patronise such establishments, and as a result associate open kitchens with that type of cuisine. These findings also appear to be in accordance with Chow *et al* (2010). These authors provide the illustration of Japanese chefs preparing sushi to underline the 'glamour' element when delivering foods directly to consumers in open kitchen restaurant scenarios. Also in line with the study conducted by Chow *et al* (2010), who identified the aspect of cleanliness as critical among restaurant operators, 29 respondents (10.5 per cent) associated open kitchen restaurants with cleanliness. Once again, a very similar number of males (10, 10.0 per cent) and females (19, 10.9 per cent) provided comments concerning their images of cleanliness:

R16 (female): 'I am currently employed at a restaurant with an open kitchen! Normally I am almost terrified to see what cooks do I in the kitchen, but when I can, I do feel that my food is "cleaner" and better maintained. It creates the necessary pressure for staff to be aware of health code and "unclean habits"'.

R17 (male): 'I would only prefer an open restaurant if I were dining alone and the kitchen activity could occupy my time while waiting for my food. Assuming the BOH (Back of House) is performing as expected, closed kitchens are fine'.

R18 (female): 'Employees would be more conscious about cleanliness and the quality of the food'.

R19 (male): 'Your food will be prepared in a clean environment by qualified chef'.

R20 (female): 'I think of a great restaurant where I use to dine and the chef would cook great steak and duck breast to perfection! Very clean!'

R21 (male): 'Spotless clean stainless steel kitchen and workspace. Employees in clean neat uniforms'.

R22 (female): 'Cleanliness, free to look in confidence of the restaurant'.

R23 (male): 'Food preparer's will be more safe [sic] in handling food! More conscientious'.

Finally, for 16 respondents (5.8 per cent), the open kitchen concept was of limited or no relevance as part of their dining experience. As opposed to previous areas concerning positive and critical images on open restaurant kitchens, where females provided clear and elaborated comments, in this case both males and females elaborated on this area. In addition, a very similar mix of males (7) and females (9) provided comments:

R24 (female): 'I usually like to watch because it interests me, but really does not make a difference'.

R25 (male): 'Sometimes I don't want to see stuff/food prepared'.

R26 (female): 'It's nice but not necessary for me to enjoy my restaurant experience'.

R27 (male): 'I focus more on the person (people) I'm with at the restaurant'.

R28 (female): 'When I go out to eat I go to enjoy the food and environment. I do not wish to watch the preparation. I go to relax and enjoy! As a mom the last thing I want to observe is a messy kitchen!'

R29 (male): 'Being able to watch the cooks prepare the food but I do not care for this. I want to visit with family or friends, not watch someone prepare my food'.

R30 (female): 'Nice concept, but not important if food is not good'.

R31 (male): 'I am really not interested in viewing my food being prepared. It is also distracting with interacting with the people at your table'.

CONCLUSIONS

The role of restaurant design, and in this context that of kitchen design, is paramount for the well-functioning of the business and for the benefit and enjoyment of consumers. According to Guyott (1997), '... designing a foodservice department is exciting and intense' (p. S149). Undoubtedly, this process can have long-term implications for the long-term viability and/or success of a business; hence, 'getting it right' the first time is critical. Regarding restaurants' design, for almost two decades, many restaurateurs have adopted an open kitchen concept for their establishments for a variety of reasons. The entertainment aspect of food preparation, as is the case of

sushi bars, other ethnic food establishments, pizza parlours and steak houses, appears to be a fundamental reason for such a design choice. In many restaurant environments, consumers have such expectations of an entertainment atmosphere as it enhances their dining experience (Hamaker, 2000). For some operators, the aspects of hygiene and cleanliness could be emphasised in an open restaurant kitchen (Chow *et al*, 2010). However, research on consumers' images – or even perceptions – of open kitchen design, while potentially vital to many restaurateurs, is almost inexistent in contemporary hospitality research. This study's objective was to add to the very limited research debate and knowledge on this reborn design concept, examining the images that are evoked in consumers' minds concerning this design concept.

The findings identified fundamentally six different types of images, with the most prevalent being positive images that open kitchens evoked (54 responses), closely followed by a mix of diverse themes (52), specifically ethnic restaurant images such as Japanese restaurants or other Asian restaurants (37) and images of cleanliness (29). Thus, arguably, consumers relate to an open kitchen design in terms of benefits. These benefits can be achieved through the positive images that liveliness, fun, entertainment and hygiene in the way foods are handled or employees behave. That only one respondent cited lack of cleanliness, and 19 referred to noise and distraction, while for 16 the restaurant kitchen concept is irrelevant further support the idea that overall the open restaurant kitchen is preferred. Clearly, that for the majority of respondents the open kitchen environment provides more positive than negative aspects does not imply that this concept should prevail.

However, many participants' comments clearly suggest that open kitchen design promotes consumers' positive feelings towards the hospitality (restaurant) establishment and helps create a sense of trust concerning food preparation and overall employee behaviour. That such sense may not always be confirmed by kitchen and other employees' actual behaviour is equally true; however, being exposed to the scrutinising eye of consumers (Chow *et al*, 2010) could develop a culture of consumer respect by reciprocating their feelings of trust.

Given the limited number of participants, the context in which the study was conducted (in a university town) and the specific region chosen, the findings cannot be generalisable to other areas in the United States or elsewhere. However, this exploration into open kitchen design from consumers' perspective provides insights that could be very valuable for the hospitality (restaurant) sector, for consumers and for government and other agencies striving for consumers' well-being. Furthermore, the study's outcomes also illustrate the need for further research, particularly among a larger number of individuals and in different regions. In this context, this study's findings could be used as a platform for future research to gather broader and potentially more solid information concerning consumers' images on open kitchen – as well as other forms of hospitality design.

In an ever-evolving environment of changing consumer demands and flux, hospitality operators can suddenly be exposed to very challenging

operational and competitive pressures. The implications of restaurant kitchen design for both restaurateurs and consumers are manifold and significant, especially as design can lead to food handling or even to consumers' 'feel good' factor. Hence, the value for operators to have access to industry information, in order for them to be alert and better prepared to face such situations, is paramount.

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