

A. Celil Cakici / Nurhayat Iflazoglu / Levent Altinay

Impact of Crowded Restaurant Perception on Affectivity and Behavioral Intentions

Abstract

This research aims to assess the influence of restaurant customers' perceived crowdedness on their behavioral intentions. The data were collected via a questionnaire developed based on the literature. Obtained 459 questionnaires were analyzed using explanatory and confirmatory factor analysis and structural equation modeling methods. It was determined that perception of human crowdedness impacted behavioral intentions in a positive manner, while the perception of spatial crowdedness had a negative influence. Therefore, findings show that perceived human crowdedness does not influence affectivity, whereas spatial crowdedness has a negative effect on it.

Keywords: human crowd, spatial crowd, affectivity, behavioral intentions, Turkey

1. Introduction

"Restaurant" is a comprehensive notion that includes service, interaction between customers and personnel, and atmosphere. In general, the first thing that draws attention and that is felt after entering a restaurant is its atmosphere (Ha & Jang, 2010). Restaurant atmosphere is a spatial arrangement that covers facility esthetic including indoor area design and decoration, background music, fragrances in the dining hall, lighting, conducive temperature, organization of the furniture, and inventory stock. Moreover, it comprises physical factors such as restaurant personnel's appearance and number and humanistic variables like customers' characteristics, personnel's competence, and social interaction originating from atmospheric elements (Liu & Jang, 2009). In recent years, restaurant customers have paid attention to tasty meals and quality service and ambiance (Heung & Gu, 2012). The fact that restaurants are social environments brings customers alongside one another with other customers. When personnel is also considered, the plurality of people from the customers' perspectives might cause crowd perception. Crowd perception is closely related to environmental, personal, and social factors and factors such as who forms the crowd, how, why, where, and when they emerge, and so on. This perception is sensed in situations when social interaction exceeds that desired/considered acceptable. For instance, it might show up when we feel that our control over the environment and our actions are limited (Knapp & Hall, 1997).

Crowd perception might diversify customers' affective evaluation. In and/or at the end of the affective evaluation process, the perceived crowd may create disturbance for customers. This situation originates from physical, social, and personal factors which make a person vulnerable to existing or perceived problems resulting from confined space. For example, perceived crowd, which is sensed as a consequence of messy or confined dining halls and distracting noises at restaurant settings, is driven by customers' related appreciation and affection about people, equipment, and interaction around them (e.g., Eroglu & Machleit, 1990; Machleit et al., 2000). Customers' reactions to a restaurant setting where they sense crowd perception can be seen as an important factor, which impacts their behavioral intentions apart from their affectivity. Behavioral intentions

A. Celil Cakici, PhD, Mersin University, Faculty of Tourism, Department of Tourism Administration, Turkey;
ORCID ID: <https://orcid.org/0000-0002-9192-1969>; e-mail: celilcakici@mersin.edu.tr

Nurhayat Iflazoglu, PhD student, Corresponding author, Hatay Mustafa Kemal University, School of Tourism and Hotel Management, Department of Gastronomy and Culinary Arts, Turkey; ORCID ID: <https://orcid.org/0000-0003-4736-789X>; e-mail: nurhayat.iflazoglu@mku.edu.tr

Levent Altinay, PhD, Oxford Brookes Business School, Department of Hospitality Management, UK;
ORCID ID: <https://orcid.org/0000-0003-4689-1032>; e-mail: laltinay@brookes.ac.uk

comprise customers' attitudes related to their feedback on the restaurant from which they receive(d) service. Customers openly share their experiences with others after purchasing a service, recommending it, stating their intention to repurchase it, or reporting negative feedback (Zeithaml et al., 1996). Literature on crowd perception might be found on the issues such as its negative consequences (e.g., Huang et al., 2017), on the food consumption behavior of consumers (e.g., Hock & Bagchi, 2018), and the determinants of the perceived crowding (e.g., Gogoi, 2017). Limited studies focus on restaurants and their customers (e.g., Saveriades, 2000; Ryan & Cessford, 2003; Buckley, 2009). Thus the current study has the potential to expand the literature, focusing on restaurants and customers. In addition, considering the growth in population and increase in the tendency to eat out year by year, it can be expected that examining the effect of crowded restaurant perception on behavioral intention can contribute to the literature in this respect. Crowds perceived at restaurants can influence customers' affectivity and behavioral intentions. Therefore this study attempts to broaden current knowledge on crowd perception of restaurant customers. The findings may help restaurant managers better understand how crowd perception can contribute to arousing positive or negative emotions, and consequently, how it can affect customers' behavioral intentions. In light of this information, restaurant managers can develop more effective and productive strategies to take necessary precautions, retain a higher number of customers, and generate profit.

2. Literature review and the hypotheses

2.1. Perceived crowdedness

"Crowd" is defined as individuals' perception of their density in a certain physical environment, whereas "perceived crowd" is the subjective evaluation of their density level in a certain setting. Therefore, it is defined as a negative evaluation of consumer density in a specific area. Literature has reported that crowd perception and related problems emerge when a large number of people come together, and the utilization limit of environmental or social supplies is exceeded (Lee & Graefe, 2003). Crowding was addressed by many studies in the literature, especially focusing on its negative consequences (e.g., Huang et al., 2017). Hock and Bagchi (2018) investigated the effect of perceived crowding on the food consumption behavior of consumers. The results of the study confirmed that when consumers process information affectively, they consume higher calories. Studies that focused on the determinants of perceived crowding employed three types of factors, namely physical, social, and personal characteristics, to effectively generate this perception (Gogoi, 2017).

Scholars have stated that the concept of the perceived crowd has come into being because of population or spatial density. Spatial density is the environment in which individuals perceive the number of nonhuman factors and their relations to each of them within the setting they exist. However, population density is related to the rate and extent of social interaction between individuals within the environment they exist and the number of individuals present (e.g., Machleit et al., 2000). An increase in the rate of encounters at a restaurant setting affects people's perceptions and behavior. In this case, consumers perceive the density of people in the environment as very high and feel the negative effects of spatial concentration, which causes a lower level of customer satisfaction (e.g., Saveriades, 2000; Ryan & Cessford, 2003; Buckley, 2009).

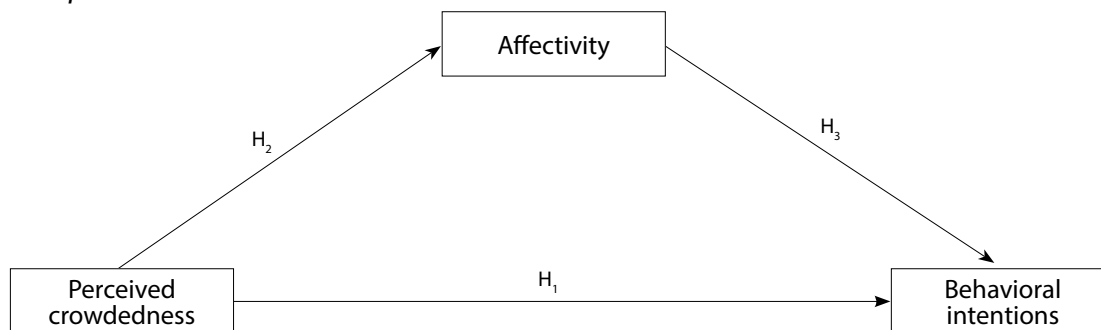
2.2. Behavioral intentions

Behavioral intentions are attitudes that determine the probability of certain behaviors' occurrence (Wang & Chen, 2012). Before certain behaviors occur, though, intention related to the behavior must be formed. Determinants that increase the possibility of a behavior occurring are associated with the strength of intention towards behavior. Behavioral intentions are an important factor in the interpretation of customer behaviors (Kaur & Gupta, 2012). Lin and Hsieh (2007) reported behavioral intentions as evidence that customers will keep or stop purchasing service (Yücenur et al., 2011). Han and Ryu (2006) also indicated that factors that trigger the possibility for a purchasing behavior to emerge are behavioral intentions. Studies dealing with

behavioral intentions reported that the notion is approached from different dimensions. For instance, Cronin et al. (2000) analyzed situations such as customers' loyalty to a business, recommending it to acquaintances, spending remarkable amounts of money, and other situations. Bush et al. (2004) examined behavioral intentions from perspectives like brand loyalty, positive publicity, and complaining. On the other hand, Smith et al. (1999) separated behavioral intentions as economic behaviors and social behaviors. They characterized economic, behavioral intentions as factors such as repurchase behavior, making more payments to a business, and leaving the business that directly affect the business's financial structure. However, they described social behavioral intentions as indirect factors such as negative WOM interaction and complaining which might affect businesses' potential customers (Lyon & Powers, 2004).

It is possible to summarize behavioral intention dimensions as (i) customer loyalty, (ii) leaving a business, and (iii) willingness to make more payments (Wong & Sohal, 2003). Behavioral intentions can also be approached within the context of cognitive, attitudinal, and behavioral loyalty. *Cognitive* loyalty is the situation that after receiving a service for the first time, customers prefer the same business from which they received the service before while deciding upon repurchasing it. They don't even consider other businesses providing a similar service. *Attitudinal* loyalty results from customers' emotional commitment to the business, and it manifests as a consequence of constant satisfaction. *Behavioral* loyalty is a situation which implies customers' repurchasing a service due to their positive attitude about the business (Güven & Sarıışık, 2014). Tse et al. (2002) analyzed how a crowded restaurant affects consumers. Kim and Park (2008) analyzed customers' reactions to crowded restaurant settings, in addition to cultural differences between American and Chinese customers, and Mosavi and Ghaedi (2012) examined consumers' behavioral intentions at fast-food restaurants. Yet, to the best of the authors' knowledge, no study has examined the effect of crowded restaurant perception on customers' behavioral intentions. In this respect, as it is visualized in Figure 1, it is assumed that the results from this research will contribute to this gap in the literature.

Figure 1
Conceptual model



When studies applied in different areas are examined, it has been detected that settings such as airports (e.g., Mattila & Hanks, 2012), banks, and bars (e.g., Hui & Bateson, 1991) have high density levels, which causes negative affectivity in customers. According to some researchers, level of density affects the amount of time customers stay at businesses (period of time spent at businesses) (e.g., Hui & Bateson, 1991; Eroglu et al., 2005) in addition to their intentions to receive a service from a business again (e.g., Machleit et al., 1994; Machleit & Eroglu, 2000; Eroglu et al., 2005; Noone & Mattila, 2009). Other than the restaurant's atmosphere, that is, perceived crowdedness of physical and psychological atmosphere impacts customers' purchasing behavior. A high level of perceived crowdedness causes customers to experience negative affectivity and make negative affective evaluations (Machleit et al., 2000). The increase in the rate of crowdedness at a restaurant setting affects people's perceptions and behaviors. Perceived crowdedness triggers stimulation in

dense environmental settings by creating tension. This stimulation disturbs customers and causes changes in purchasing behavior. A high level of perceived human crowdedness also negatively influences privacy and personal space (Li et al., 2009). Consequently, customers perceive that crowdedness harms their right to receive a good service, so crowdedness and density result in a negative impact. In the light of this information, the following hypothesis is developed.

H1: Perceived crowdedness at restaurants has a negative impact on customers' behavioral intentions.

2.3. Customer affectivity

Emotion is accepted as a display of the feeling or a state of generally containing feeling. In general, emotion has been defined as a stirred-up state of the organism or emergency reactions. It has been accepted that all behaviors or every experience have an affective aspect. Emotions may be classified in dimensional terms (positive and negative emotions/affectivity in some cases), such as pleasantness-unpleasantness, excitement-calm, tension-relaxation, etc. Based on this, affective attitudes or actions come to light. There might be some individual differences in affective actions based on different types of stimulation. By a short saying, affects might be evoked by subordinated parts reinforcing or harmoniously counterbalancing the feeling which the dominant object evoked. Thus, there might be found a link between personal mood and an individual's affective behavior. Affect is an abstract term, can occur consciously or unconsciously. An individual exposed to any stimulus may show positive or negative affectivity. Positive affectivity, mainly an internal situation, refers to an individual's disposition to be happy across time and situations. On the other hand, negative affectivity is an individual's disposition to experience discomfort across time and situations. It is accepted that positive and negative affectivity are related but distinct, and they are also personality variables (Agho, 1992).

Affectivity has three dimensions: valence, intensity, and action. Valence is the positive or negative attitude, and intensity is the degree of valence (Cacioppo et al., 1986; Teh et al., 2018). At last, affect prepares the person for appropriate action. Since our affectivity forces us to display certain behaviors almost in every situation, affectivity determines perseverance in our actions. Affective reactions or behaviors of customers in restaurant settings have been an important topic for restaurant marketing research (Mattila & Ro, 2008; Lee et al., 2009; Han et al., 2010). Literature has argued that positive affective reactions increase values perceived by customers (Hyun et al., 2011) and their fulfillment levels (Mattila & Ro, 2008) to a significant extent, and in this way, generate customer satisfaction (Lee et al., 2009; Bowden & Dagger, 2011). Consumers might experience six affective dimensions at a restaurant (Namkung & Jang, 2010). These symbolize three positive emotions which are *joy (happiness, satisfaction, and favorable reception and sincerity)*, peace (comfort, ease, and relaxation), revival (refreshment, freshness) and three negative emotions which are anger (irritability, furiousness, and rage), sadness (frustration, disappointment, dispiritedness, depression) and disgust (loathing, discontent, and discomfort). Research shows that emotions influence behavioral intentions, including word-of-mouth (WOM) communication and loyalty (e.g., Nyer, 1997; Yu & Dean, 2001; Derbaix & Vanhamme, 2003; Wong, 2004; Hicks et al., 2005; Mummalaneni, 2005; White & Yu, 2005; Yüksel, 2007). In the meantime, even though researchers agree that emotions are determinants of behavioral intentions, there is no certain evidence about the connection between two structures (Bigne et al., 2005). Yu and Dean (2001) discovered a significant correlation between satisfaction and willingness to make more payments and positive statements. In addition, Wong (2004) found that a customer's feeling of enjoyment or disappointment is an important sign of customer loyalty, while White and Yu (2005) determined that positive emotions (such as hopefulness, happiness, and a pleasant surprise) are positively correlated with willingness to make more payment. Hicks et al. (2005) attested that satisfaction increases intention to repurchase to a remarkable degree.

Perceived crowdedness in the environment where the service is provided shapes individuals' thoughts about service, thereby affecting their beliefs and judgments. If a restaurant's physical environment is perceived as cozy and alluring despite perceived crowdedness, it might be then quite predictable that the physical

environment causes positive evaluations about service quality and eating experience (Liu & Jang, 2009). Perceived crowdedness not only creates a sense of pleasure because of people's presence but also sometimes affects stimulation in dense environmental settings by creating tension (Li et al., 2009). For these reasons, consumers feel the negative effects of crowdedness by perceiving the density of people in the environment at a very high level, which causes customer dissatisfaction (Saveriades, 2000; Ryan & Cessford, 2003; Buckley, 2009). In the literature, some researchers make statements. O'Guinn et al. (2015) stated that crowdedness density in the service environment affects customers' perceptions about individuals' features such as class levels and social status. Soriano (2002) asserted that service atmosphere is influential over behavioral intentions. Other researchers (e.g., Mowen et al., 2003; Pons et al., 2006) found that crowdedness might positively affect customers' perception and evaluations in some situations (popular place, perception of product quality, etc.). Thus, the level of crowdedness density in a setting affects customers' affectivity positively or negatively depending on the type of place and customers' expectations about that place. In light of this information, the second hypothesis is developed:

H2: Perceived crowdedness at restaurants influences customers' affectivity.

Lin (2004), Han et al. (2010), and Hyun et al. (2011) analyzed premises of behavioral intentions in a restaurant environment and determined that emotions play an active role in the formation of customers' behavioral intentions, such as willingness to repurchase a service and making recommendations. Some studies showed that affectivity has an impact upon behavioral intentions, including WOM communication and loyalty (e.g., Nyer, 1997; Yu & Dean, 2001; Derbaix & Vanhamme, 2003; Wong, 2004; Hicks et al., 2005, Mummalaneni, 2005; White & Yu, 2005; Yüksel, 2007). Yu and Dean (2001) discovered a meaningful relationship between willingness to make more payments and positive expressions. Moreover, Wong (2004) found that consumers' feelings of enjoyment and disappointment are essential signs of consumer loyalty; after that, White and Yu (2005) determined that positive emotions (being hopeful, happy, and a nice surprise) are positively correlated with willingness to make more payment. Hicks et al. (2005) posited that satisfaction increases intention to repurchase to a significant degree. In brief, as behavioral intentions which include attitudes related to feedback towards business from which service is received, are seen as customers' openly conveying their experiences after buying a service, their recommendations, their intentions to repurchase, or reporting negative feedback and actions (Zeithaml et al., 1996), the following hypothesis is generated:

H3: Customers' affectivity about restaurants influences their behavioral intentions.

3. Method

3.1. Measurements

Data in this empirical research were collected by a questionnaire including three scales in addition to demographic questions. For the behavioral intentions scale, a four-item scale developed by Zeithaml et al. (1996) was used. Perceived crowdedness was determined via an 11-item scale (Tse et al., 2002; Ryu, 2005; Kim & Park, 2008). Response categories of all items were prepared according to a five-point (1: I certainly disagree, ..., 5: I certainly agree) Likert scale. Customers' affectivity evaluations were determined by a 10-item scale derived from studies of Tse et al. (2002), Ryu (2005), and Kim and Park (2008). Response categories of this scale, which have been subjected to semantic differential scale as negative/positive adjectives, are in ± 3 intervals.

3.2. Sampling and data collection

The customers who get service from à la carte restaurants were the research population. The sampling framework consisted of customers who received service from à la carte restaurants in Mersin. The reason for selecting customers in Mersin for data collection is mainly the ease of access to these businesses. The second reason is that Mersin is a metropolitan city; therefore, too many à la carte restaurants operate in Mersin city center. To

determine perceived crowdedness clearly, the managers of a well-known restaurant and always crowded in addition to providing à la carte service were contacted by one of the researchers. The management team was informed about the research and got their cooperation. Thus, this restaurant was chosen via the purposive sampling method. To achieve correct data and avoid disturbing customers, one of the researchers pretended to work as a waiter, and the research survey was handed out when the customers ordered desserts and/or tea and coffee. Data collection was performed between 16th and 24th April 2018. The fact that there was no specific data regarding the customers coming to the restaurants in Mersin made it impossible to clearly express the population size. In many instances, especially in research using factor analysis (Bartlett et al., 2001), a sample size equal to or greater than 384 was assessed as a good size. At the end of the data collection period, a total of 459 customers agreed to participate in the research voluntarily.

3.3. Data analysis

The data collected via a questionnaire were subjected to be assessed by the point of overall measurement quality and test the hypothesized relationships. At first, for psychometric assessment for the measures, confirmatory factor analysis (CFA) was utilized. It made it possible to evaluate the convergent and discriminant validity of the measures, as well as internal consistency reliability. In the second phase, the assessment of the relationships in the structural model was done. The overall χ^2 measure, adjusted goodness of fit index (AGFI), goodness-of-fit index (GFI), comparative fit index (CFI), incremental fit index (IFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR), and etc. were benefited in the evaluation of model fit for the measurement and structural models.

3.4. Reliability and validity of the data

Before conducting CFA, item analysis was conducted for three scales. For this purpose, item-total correlations and squared multiple correlations (R^2) were preferred to have a value greater than 0.300 (Long, 1991). There were three items in the perceived crowdedness scale (There is not much crowding at the restaurant, 0.130; Restaurant looks so spacious, 0.235; There is an airy environment, 0.264) with item-total correlations lower 0.300. After dropping these three items, in the remaining eight items, it was observed that item-total correlations differed between 0.345 and 0.581, and that squared multiple correlations (R^2) varied from 0.277 to 0.557. The Alpha coefficient of the scale as a whole was calculated as 0.781.

Affectivity levels of customers were determined via a 10-item scale including opposite adjectives and with points in ± 3 intervals. In this scale, item-total correlations ranged from 0.696 to 0.910, and multiple R^2 values ranged from 0.558 to 0.855. In total, the scale's Alpha parameter was counted as 0.967. In the four-item behavioral intentions scale, an item was omitted from the scale because of its low value of squared multiple correlations (0.214). In the three-item scale, item-total correlations were between 0.912 and 0.926, whereas squared multiple correlations parameters ranged from 0.833 to 0.870, so, overall, the coefficient of internal consistency was counted as 0.964. Therefore, it is possible to say that both scales are reliable.

First of all, explanatory factor analyses were applied to three scales. In the eight-item perceived crowdedness, two dimensions were extracted, explaining 62.117% of the total variance. The KMO value was 78%; moreover, the Bartlett test (χ^2 :1,198.830; d.f.:28; $p < 0.001$) was also significant. The first dimension is called "Human Crowdedness" while the second dimension is called "Spatial Crowdedness". The 10-item affectivity scale has explained 77.221% of the total variance in one dimension. The KMO value for this construct was 94.5%, and Bartlett's test of sphericity (χ^2 :5,433.837; df: 45; $p < 0.001$) was also significant. The three-item behavioral intentions scale has variance by displaying a unidimensional structure. The KMO value for this scale was 77.9%; furthermore, the result of the Bartlett test (χ^2 :1,647.586; d.f.:3; $p < 0.001$) was also significant.

CFA (Table 1) yielded the following model fit statistics: (χ^2 :905.27; d.f.:183; χ^2 /df: 4.946 < 5; RMSEA: 0.093; CFI: 0.96; GFI: 0.84; AGFI: 0.80; IFI: 0.96; RFI: 0.94; NFI: 0.95; NNFI: 0.95; RMR: 0.092; SRMR:

0.054; Model CAIC <Saturated CAIC: 1247.46 < 1646.81). It has been determined that fit statistics were at acceptable level (Hair, Black, Babin & Anderson, 2010). All standardized loadings were greater than 0.50 and t-values were higher than 1.96, (minimum t-value: 11.94) which is a theoretical value at the $\alpha:0.05$ level (Jöreskog & Sörbom, 1994).

The average variance extracted (AVE), of which value was preferred to be greater than 0.50 (Huang et al., 2013) by "Human Crowdedness", "Spatial Crowdedness", "Affectivity" and "Behavioral Intentions", were 0.51, 0.47, 0.75, and 0.90, while composite reliabilities (CR) were 0.80, 0.78, 0.97, and 0.96 respectively (Table 1). For spatial crowdedness, AVE was less than 0.50, but its CR was 0.78. It has been reported that in the case of any dimension having an AVE value between 0.40 and 0.49 but CR value greater than 0.60, the convergent validity of the construct was still adequate (Hair et al., 2010; Huang et al., 2013). Overall, model fit statistics, significant loadings, and average variances extracted by latent variables provided evidence of convergent validity (Fornell & Larcker, 1981; Hair et al., 2010).

Table 1
Results of confirmatory factor analysis

Factors	Standard values	Error	t-values
Human crowdedness	AVE: 0.51; CR:0.80; MSV: 0.09; ASV: 0.04		
The restaurant is too crowded for me.	0.86	0.26	20.58
The restaurant is a little too dense.	0.80	0.36	18.81
There are a lot of customers at the restaurant.	0.57	0.68	12.27
I feel like there are too many people here.	0.59	0.65	12.99
Spatial crowdedness	AVE: 0.47; CR:0.78; MSV: 0.13; ASV: 0.10		
I felt stuck while eating my meal at the restaurant.	0.57	0.68	11.94
The restaurant made me feel confined/cramped.	0.73	0.46	16.34
I feel dense/congested because of being here.	0.79	0.37	17.99
I feel like there is no space for me here.	0.63	0.60	13.66
Affectivity	AVE: 0.75; CR:0.97; MSV: 0.13; ASV: 0.08		
Unhappy – Happy	0.71	0.49	17.44
Uncomfortable - Content	0.89	0.21	24.23
Stressed – Cheerful	0.85	0.27	22.70
Disappointed - Satisfied	0.93	0.14	26.23
Got Bored - Had fun	0.92	0.16	25.76
Calm – Excited	0.83	0.32	21.63
Not paid attention. -Got surprised	0.83	0.31	21.75
Suffocating – Spacious	0.90	0.19	24.80
Stuck - Comfortable	0.87	0.24	23.50
Angry – Pleased	0.91	0.18	25.15
Behavioral intention	AVE: 0.90; CR:0.96; MSV: 0.12; ASV: 0.08		
I recommend this restaurant to my friends and others.	0.95	0.10	27.27
I can say positive things about this restaurant to other people.	0.96	0.07	27.92
I want to eat a meal at this restaurant again.	0.93	0.13	26.44

Notes: AVE: average variance extracted; CR: composite reliability; MSV: maximum shared variance; ASV: average shared variance (ASV).
 $\chi^2:905.27$; d.f.:183; $\chi^2/d.f.$: 4.946< 5; RMSEA: 0.093; CFI: 0.96; GFI: 0.84; AGFI: 0.80
 IFI: 0.96; RFI: 0.94; NFI: 0.95; NNFI: 0.95; RMR: 0.092; SRMR: 0.054;
 Model CAIC <Saturated CAIC: 1247.46<1646.81.

Further, the values of the maximum shared variance (MSV) and average shared variance (ASV) were combined with the AVE values (Table 1). If all the ASV and MSV values are recorded less than their respective AVE values, discriminant validity prevails (Hair et al., 2010). Additionally, the fact that all three squared roots of AVE values were bigger than their correlations shows that discriminant validity had been enabled (Hair et al., 2010) (Table 2).

Table 2
Means, standard deviations and correlations of study constructs

	Mean	SD	HC	SC	A	BI
Human crowdedness (HC)	3.5942	0.98694	(0.71)			
Spatial crowdedness (SC)	2.2032	0.98209	0.303**	(0.68)		
Affectivity (A)	1.7651	1.43412	-0.082	-0.358**	(0.87)	
Behavioral intentions (BI)	4.4001	0.93914	0.123**	-0.305**	0.344**	(0.95)

Notes: Correlations are significant at the 0.01 level (two-tailed test). SD: Standard deviation. The numbers in the cells of the diagonal line are squared root of AVE.

4. Findings

4.1. Participants' profile

Fifty-seven percent (57%) of research participants are women, two-thirds of whom are married. About a quarter of participants are between the ages of 20 and 29 while about 30% are between the ages of 30 and 39, and around 20% are between 40 and 49. One third of them are high-school graduates, while around 10% have associate degrees, and about 40% have Bachelor's degrees. Almost 20% of them have a monthly income¹ of less than 500 US\$ (at the time when the research was conducted, the minimum wage was 1,600 TL). About 45% of them have a monthly income of 1,000 US\$ and more (Table 3).

Table 3
Participants' demographic profile (n:459)

Variables	n	%	Variables	n	%
Income groups (1 \$: 4.10 TL; April 24, 2018)			Gender		
500 \$ and less	99	21.6	Female	261	56.9
501-750 \$	85	18.5	Male	198	43.1
751-1,000 \$	70	15.3	Marital status		
1,001-1,200 \$	66	14.4	Married	306	66.7
1,200-1,800 \$	54	11.8	Single	153	33.3
1,801 \$ and more	85	18.5	Age groups		
Education level			20-29	108	23.5
High school and below	152	33.1	30-39	144	31.4
Associate degree	53	11.5	40-49	100	21.8
Undergraduate degree	174	37.9	50-59	69	15.0
Graduate degree	24	5.7	60-69	38	8.3

4.2. Structural equation model

In the present study, the hypotheses were tested using structural equation modeling. The same fit statistics like in measurement was acquired (χ^2 :905.27; d.f.:183; χ^2 /df: 4.946 < 5; RMSEA: 0.093; CFI: 0.96; GFI: 0.84; AGFI: 0.80; IFI: 0.96; RFI: 0.94; NFI: 0.95; NNFI: 0.95; RMR: 0.092; SRMR: 0.054; Model CAIC < Saturated CAIC: 1,247.46 < 1,646.81). Therefore the model has an acceptable level of fit. From the modeling test performed, the perception of human crowdedness affects behavioral intentions positively (β : 0.29; t:5.52), whereas the perception of spatial crowdedness has affected behavioral intentions negatively (β : -0.33; t:-5.54). Hence, it can be stated that hypothesis H1 (*Perceived crowdedness at restaurants affects customers' behavioral intentions in a negative way*) has been supported.

For the second hypothesis, it was found that human crowdedness does not influence affectivity (β : 0.05; t:1.03) while spatial crowdedness negatively impacts it (β : -0.42; t:-7.20). Thus hypothesis H₂ (*Perceived crowdedness*

¹ Monthly income was asked in Turkish Liras (TL), taking into account of minimum wage which was 1,600 TL at the data collection time. All monthly income reported in TL transformed into US\$, by the exchange rate of April 24, 2018. It was 1 \$: 4.10 TL.

at restaurants influences customers' affectivity) has been partially supported. For the last hypothesis, it was determined that affectivity has a positive influence (β : 0.24; t :4.85) upon behavioral intentions. Thus hypothesis H₃ (*Customers' affectivity related to restaurants has an impact on their behavioral intentions*) has also been supported.

Table 4
Results of model test

#	Relation	Standardized path coefficients	t-value	Result
H _{1a}	HC→BI	0.29	5.52	Supported
H _{1b}	SC→BI	-0.33	-5.54	Supported
H _{2a}	HC→A	0.05	1.03	Not supported
H _{2b}	SC→A	-0.42	-7.20	Supported
H ₃	A→BI	0.24	4.85	Supported

Notes: HC: Human crowdedness; SC: Spatial crowdedness; A: Affectivity; BI: Behavioral intentions.

5. Discussion and implications

Interesting results have been acquired from the research undertaken with customers of a restaurant which is well known to be quite crowded. Perception of spatial crowdedness negatively affects behavioral intentions. This result corresponds to the studies of Machleit et al. (2000), Lee and Graefe (2003), Kim and Park (2008) and Li et al. (2009). It is known that the poor decoration of the physical environment, which affects customers' perception of aesthetic quality in the service area and on their evaluations of it, affects customers' certain thoughts and feelings. That is why it can be postulated that an inappropriate restaurant atmosphere has the characteristics of an element that causes people not to repurchase the service and not recommend it to others. So, the importance of creating a more comfortable setting from the customers' perspective emerges. In this sense, it is beneficial for à la carte restaurants with heavy customer traffic to cooperate with a reputable interior decorator.

It is surprising that the perception of human crowdedness positively affects behavioral intentions, whereas the perception of spatial crowdedness' effect is negative. This finding shows similarities with studies done by Tse et al. (2002), Mowen et al. (2003), and Pons et al. (2006). What is common between the previous studies and the present study is that they both reach the conclusion that customers perceive the human crowdedness at a restaurant positively in some cases (such as good food quality, freshness and greenness of products, reasonable price, image of a popular place etc.). In this context, when the opposite is imagined, it is possible to conclude that the low quality of an uncrowded restaurant gives the impression of high price and low restaurant image. Of course, it is not possible to generalize the results that emerge because, in their study, Kim and Park (2008) found that an increase in perceived crowdedness results in a decrease in satisfaction. Moreover, this situation differs from culture to culture.

Machleit et al. (2000) emphasized spatial crowdedness as the environment where the number of inhuman elements in a setting in which individuals exist and their relations with each is perceived. Consumers' approach behaviors could take many forms, from the focus on staying calm or ignoring the proximity of others to a focus on the positive aspects of the restaurant environment (Song & Noone, 2017). Nevertheless, affectivity, which is perceived in spatial crowdedness, is expressed as follows from different perspectives. First, from the environmental perspective, it is perceived as "decreasing area, undesired noise, lack of required sources or decrease in the ability to acquire them, absence of those who determine the dominance area". Second, from the *personal* perspective, it is perceived as "personality characteristics representing gender differences, wish of social interaction, control, dominance, low self-esteem, and negative experiences related to high crowdedness", and "social interaction with close people existing in the same environment at an unwanted high amount (and lack of ability to change these cases), in addition to interaction in a different group and competitive,

unfriendly and undesirable interactions" (Knapp & Hall, 1997). The main theme in which these expressions are merged is that the perception of spatial crowdedness is liable to increase when there is a decrease in the perceived ability to control and influence social and physical settings, controlling and influencing social and physical settings. The current study has detected that perceived human crowdedness at restaurants does not influence affectivity; however, spatial crowdedness harms it. These results show similarities with the findings of Saveriades (2000), Ryan and Cessford (2003), Li et al. (2009), and Buckley (2009).

It is undeniable that factors such as attracting customers to business, retaining the existing number, and increasing it holds vital importance to food-drink firms. In this context, when it is considered that spatial crowdedness influences affectivity negatively, restaurant businesses need to come up with solutions on how to diminish spatial crowdedness. These solutions must be applied according to the current physical structure of the business. Still, some strategies can be applied in a general sense. For example, the background music tone can be adjusted to a level that does not prevent customers who share the same table from hearing each other. Arranging the tables properly (not making customers think that their personal space is invaded) in addition to placing employees' circulation routes into the setting in a suitable way (this situation minimizes occupational accidents such as hitting, crushing and spilling particularly during working hours) might reduce the degree of spatial crowdedness. Thus, while managers increase human crowdedness by overseeing and ensuring organization for an easy service flow and a stimulating atmosphere, they can help decrease the perception of spatial crowd.

In general, consumers show their reaction towards businesses in two opposite ways –*approximation* and *avoidance*. Wish to stay in the service environment or staying away, and behaviors of discovering the physical setting or staying away from it can be given as examples of approximation and avoidance. Besides, businesses want to improve individual approximation behaviors and decrease avoidance behaviors (Han & Ryu, 2009). Namkung and Jang (2010) stated that there are three emotional dimensions that customers might feel such as joy (happiness, satisfaction, favorable reception, sincerity), peace (comfort, ease, relaxation), and revival (refreshment, freshness). Some studies in the literature (e.g. Nyer, 1997; Yu & Dean, 2001; Derbaix & Vanhamme, 2003; Wong, 2004; White & Yu, 2005; Hicks et al., 2005; Yüksel, 2007) have shown that positive affectivity has an impact on behavioral intentions (such as positive WOM interaction, repurchasing the service, willingness to pay more, etc.). Similarly, findings of the current study have shown that affectivity which has been formed at restaurants, has a positive influence on behavioral intentions. This is always a desired situation for restaurant businesses in maximizing their success and income. To keep this desirable status and ensure its sustainability, it is recommended that managers present high-quality services to increase customers' satisfaction without causing a loss for the businesses. The results of this study in which the relationship between affectivity and behavioral intentions is analyzed should not be ignored by restaurant managers because customers' behavioral intentions are the essential determinants for restaurants to succeed or otherwise. Therefore, in a competitive work environment, restaurant managers should meet customers' expectations and even try to find ways to surmount these expectations by means of the atmosphere they create and the service quality.

In this research, the customers who took part in the survey voluntarily knew that the restaurant that was chosen by purposive sampling was quite crowded. Even if the characteristics of the chosen restaurant, deliciousness of appetizers and food, the rationality of price/quality balance, and crowdedness are known, it was found that they have created a positive impact on behavioral intentions. So, although customers have felt a little discomfort about the spatial crowdedness (physical environment), it ensured that they carry positive behavioral intentions for the restaurant by considering the taste and perceived value. When considered from the perspective of consumer behavior, if appetizer and food alternatives are plenty and delicious with a rational price/quality balance, it was found that customer density (human crowd) does not affect behavioral intentions negatively. It can also be thought that the products might be fresh in crowded places. Customers who are used to and aware of the crowdedness of the restaurant do not feel too much discomfort about the case. This finding seems to be significant from an academic perspective.

6. Limitations and future study suggestions

The current study presents a point of view about how and in which dimensions consumers evaluate crowdedness, and also their affectivity and behavioral intentions. It was a very good restaurant for researching crowdedness, but there was no additional crowded restaurant in Mersin. Therefore data had to be collected from a single restaurant, thanks to the valuable cooperation of restaurant management. Similar studies conducted in quieter restaurants will be able to draw comparisons between the contexts of restaurants with human crowdedness and restaurants with calm settings. Perception of crowdedness and its impact on customers is still a topic that requires the attention of researchers. In future research, perception of crowdedness might be researched with the topic of "good and bad word of mouth communication". In those researched, semi-experimental research designs may result in useful knowledge for the literature and the sector and in-depth interviews and observations.

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