Consumer Reactions to Crowded Retail Settings: Cross-Cultural Differences between North America and the Middle East

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ABSTRACT

Most of the research dealing with consumer–consumer interactions emphasizes the negative consequences of sharing the service experience with other consumers. Crowding, in particular, represents one of the important environmental factors affecting consumers' retail experience. However, recent studies in the context of hedonic services (e.g., amusement parks, concerts, etc.) have mentioned that crowds may potentially enhance consumers' service experience. The present study aims at demonstrating the presence of these positive consumer responses in a crowded hedonic situation, while investigating the influence of cultural differences in crowd-related issues. With the use of consumers from different cultures (North America and the Middle East), reactions to similarly crowded situations in a hedonic situation are compared. Results suggest that Middle Eastern respondents perceive both a lower level of density and appreciate crowded situations more than their North American counterparts. Potential explanations are discussed. © 2006 Wiley Periodicals, Inc.

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Past research (e.g., Altman, 1975; Eroglu & Harrell, 1986; Eroglu & Machleit, 1990; Harrell, Hutt, & Anderson, 1980; Stokols, 1972) has widely acknowledged the considerable interest in studying crowding issues in a retailing environment. Crowding is, after all, an important environmental factor affecting consumers' retail experience (Machleit, Eroglu, & Powell Mantel, 2000). The growth of experiential and hedonic services in marketing (Donovan, Rossiter, Marcoolyb, & Nesdale, 1994; Holt, 1995; Martin, 1996; Wakefield & Blodgett, 1999, 1994), and the increasing concerns about the lack of managerial directions to deal with crowding issues (Stewart & Cole, 2001; Eastman & Land, 1997) suggest that more research should be devoted to this topic. Furthermore, the need for a better social and psychological understanding of crowding issues is reinforced by the daily challenges of urban and crowded lives (Sinha & Nayyar, 2000). Finally, although research on crowding has, in recent years, benefited from important developments in sociology and psychology (Brierley & Newell, 1998; Evans, Rhee, Forbes, Allen, & Lepore, 2000; Felmlee & Sprecher, 2000; Stott & Drury, 2000), the marketing field has yet to integrate most of these findings in a commercial setting. Indeed, several gaps in the business literature call for a deeper analysis of crowd-related issues.

First, unlike research in environmental psychology, the business literature on crowding is inconsistent in its definition and operationalization of key concepts, such as *density*, *crowding,* or *crowdedness* (Altman, 1975; Eroglu & Machleit, 1990; Heimstra & McFarling, 1978; Hui & Bateson, 1991; Sinha & Nayyar, 2000). The inconsistent use of these terms in several studies contributes to the multiplication of incoherencies in results and ambiguity (Baum & Epstein, 1978; Eroglu & Machleit, 1990).

Second, most marketing studies dealing with crowding issues present well-known, conclusive results about the negative consequences triggered by crowded situations (Eroglu & Machleit, 1990; Machleit, Kellaris, & Eroglu, 1994; Machleit, Eroglu, & Powell Mantel, 2000). Only recently has it been suggested that, in the context of some hedonic services (e.g., amusement parks, concerts, etc.), crowds might positively influence consumers' service experience. Empirical studies conducted in these types of settings, however, have been very scarce (Brown, Van Raalte, & Andersen, 2000; Holt, 1995). Therefore, it is critical to know what variables may turn similarly crowded situations into either a positive or a negative experience, and to gain an appreciation of the underlying processes. In this line of research, some recent studies have suggested that several mediating and moderating variables, such as prior expectations and other personal variables, may reduce the negative impact of crowds on consumers' service experience (Evans, Rhee, Forbes, Allen, & Lepore, 2000; Hui & Bateson, 1991; Machleit, Eroglu, & Powell Mantel, 2000).

The present study aims at filling some of the gaps previously presented. The objectives of this research are twofold. First, it is intended to empirically demonstrate the presence of positive consumer responses in a crowded hedonic situation. Second, the influence of culture in crowd-related issues

is investigated. It is assessed whether, in a similar retail setting, consumers from different cultures (North America and the Middle East) would have different perceptions and reactions. Culture has been identified as a strong influencer in environmental psychology studies (Evans, Rhee, Forbes, Allen, & Lepore, 2000), but its influence in crowded commercial settings has been neglected by researchers, despite growing cross-cultural interactions due to the globalization of services (Jamal, 2003).

LITERATURE REVIEW

Consumers in the Service Experience

Most of the research dealing with consumer–consumer interactions emphasizes the negative consequences of sharing the service experience. These negative consequences have been asserted at both the individual and the collective levels. In the former, rude or unexpected behaviors from others are found to spoil the service experience, whereas, in the latter, the presence of large groups (crowds) is shown to alter the service experience (Grove & Fisk, 1997). This stream of research has focused primarily on waiting line issues (Hui, Dube, & Chebat, 1997; Hui, Thakor, & Gill, 1998; Schmidt, Dube, & Leclerc, 1992) and critical incidents in services (Edvardsson, 1992; Grove & Fisk, 1997).

Nevertheless, only a handful of articles have mentioned a positive contribution or an enhancement of the service experience as a result of the presence of other consumers in the service setting. These articles have essentially used experiential products such as river rafting or sports spectatorship, and have highlighted the potential contribution of the participants in creating enjoyable experiences (Arnould & Price, 1993; Eastman & Land, 1997; Holt, 1995; Price, Arnould, & Deibler, 1995).

The inconsistency in the definitions of crowding and density in these studies may also explain the seemingly discrepant findings. Therefore, the next section will focus on offering detailed definitions of these two concepts.

The Complex Nature of Crowd Issues: Crowding and Density Definitions

Many researchers in psychology and sociology have criticized the fact that terms such as density, crowding, or crowdedness, despite being conceptually different, are often used synonymously (Altman, 1975; Heimstra & McFarling, 1978; Sinha & Nayyar, 2000). In an effort to reduce this confusion, some have offered clear definitions and practical illustrations of each concept (Rapoport, 1976; Stokols, 1972; Wooldredge, 1997).

Stokols (1972) was the first author to provide clear definitions of crowding and density. He made a conceptual distinction between the two terms based on a physical–psychological criterion (Altman, 1975; Baum & Epstein, 1978). Adopting a sociological approach, Stokols limits density

to a strictly physical meaning: "*the number of individuals per unit of space*" (Stokols, 1972). With the use of this definition, some authors have suggested that an additional distinction between *social* and *spatial* density should also be made (Altman, 1975; Loo, 1973). In a socially dense setting, the high number of individuals in the physical setting is responsible for the dense situation; whereas in the spatially dense situation, the lack of space is responsible for the dense situation.

Using a psychological approach, Rapoport (1975) emphasizes the importance of the perceptual component of density. He considers that there is a missing link between the physical features of density and the psychologically negative states of crowding. His definition includes the number of people in a given space, but goes beyond this simplistic vision with the inclusion of psychological and social factors. He argues that perceived density, not physical density, should be considered as the key concept in the study of dense environments along with its consequences for individuals. Other researchers have also recognized the complexity of density definitions (e.g., Galle, Gove, & McPherson, 1972; Sundstrom, 1978), and the potential role of individual perceptions in the conceptualization of density. These researchers have called for identifying "*variables that accompany or result from high density*" (Altman, 1975). They suggest that these variables reflect the high-density situation at stake and should help to explain why high density may not always trigger stress (Altman, 1975; Sundstrom, 1978).

In particular, variables such as territoriality, personal space, privacy, and freedom of movement have all been suggested as visible manifestations of density levels (Baron, Mandel, Adams, & Griffen, 1976; Insel & Lindgren, 1978; Worchel & Teddlie, 1976). Altman (1975) presents privacy as a central regulatory process through which an individual decides to be more or less accessible and open to others. He suggests that dense settings usually reduce privacy and that, generally, individuals use internal mechanisms to reach a privacy-based equilibrium.

Personal space is often described as an envelope or a bubble surrounding a person (Heimstra & McFarling, 1978). The properties of personal space include an invisible boundary, an "attachment" of the boundary to the self, and a dynamic process. Personal space represents an essential feature of individuals' social behavior in relation to their physical environment and social interactions. Dense environments are usually associated with limited personal space (Altman, 1975; Baum & Epstein, 1978; Sinha & Nayyar, 2000).

Territoriality is another important concept in social behavior studies. It refers to the desire to possess or occupy portions of a given territory (Altman, 1975; Baum & Epstein, 1978; Stea, 1965). Territoriality is closely related to the concept of personal space but only applies to fixed places or geographic areas (Sommer & DeWar, 1963). Being able to have and preserve one's territory, even in a public setting, is an essential component of social interactions. Several authors have shown that individuals in dense settings feel unable to own any "territory" (Baron & Epstein, 1978; Baum & Valins, 1977).

Freedom of movement refers to one's ability to move freely in a setting and to get access to specific locations in order to reach a specific goal. Freedom of movement is crucial in social interactions and is a good reflection of density levels encountered (Klofas, Stojkovic, & Kalanich, 1992; Manning & Valliere, 2001; Sinha & Nayyar, 2000; Wooldredge, 1997).

In order to capture the complex nature of density and its perceptual components, it is imperative to consider all of the reflective variables described above, rather than relying solely on the number of individuals in a given space. This approach allows for a richer understanding of density and its consequences for the consumer.

Most researchers agree that density and crowding are two distinct concepts (Altman, 1975; Rapoport, 1975; Stokols, 1972). Following Rapoport's (1976) proposition, crowding has been treated as a negative affective evaluation of a given dense situation (Eroglu & Harrell, 1986; Stokols, 1972). It has been associated with stressful feelings, which can be attributed to either a lack of physical or psychological space (Stokols, 1976), excessive contact with others (Desor, 1972), or disharmonious psychological processes (Esser, 1972). In all of these studies, crowding has been conceptualized as an unpleasant, stressful, and negative affective experience.

Density, Crowding, and Service Satisfaction: What Is the Relationship?

It is important to understand how density is linked to crowding and how cognition, perception, and affective issues are involved (Baum & Epstein, 1978; Downs & Stea, 1979). In most studies of retail crowding (Eroglu & Machleit, 1990; Machleit, Eroglu, & Powell Mantel, 2000), the perception of high levels of density is posited to trigger a negative affective evaluation (crowding) of the situation, which, in turn, leads to negative outcomes for the consumer (e.g., dissatisfaction). However, a study by Hui and Bateson (1991) concludes that density may produce positive emotional and behavioral effects in certain service settings (e.g., a bar), and lead to negative effects in other settings (e.g., a bank). Positive density effects have also been identified in other studies dealing with experiential and hedonic consumption, using baseball games, bars, and discos as stimuli (Eastman & Land, 1997; Holt, 1995; Price, Arnould, & Deibler, 1995; Sherry, 1998). Thus, contrary to the predominant views in marketing research, it seems that crowds may sometimes play a significant role in building pleasant experiences. For instance, in a leisure situation in which crowds are appreciated (e.g., bar or sporting event), one could expect the retail crowding model to apply. However, in this case, the affective evaluation of the dense situation would be positive instead of negative, and the final outcome for the consumer would be satisfaction. Although similar arguments have already been proposed (e.g., Eroglu & Machleit, 1990), there is, to date, no direct empirical support for the positive route between dense retail situations and consumer satisfaction.

The environmental psychology literature, which emphasizes the various manifestations of density (privacy, personal space, freedom of movement, territoriality), offers some evidence consistent with this research and provides additional support for more specific hypotheses.

For instance, Altman (1975) reports that too much or too little privacy usually leads to unsatisfactory experiences. However, he also suggests that, in some cases, dense and low-privacy settings trigger positive reactions for the individual (e.g., family reunions, holidays). This idea is further developed by Holt (1995) in the communion aspect described during baseball games. He maintains that privacy and individualism disappear while happiness and pleasure arise from sharing and living as a group. The lack of personal space and freedom of movement are also commonly experienced in dense settings. In most cases, people tend to protect their own space and appreciate their ability to move freely. A number of qualitative studies, however, suggest that, in a crowded leisure setting (e.g., sports bar, disco, rock concert, markets), people tend to look for, and actually value, the lack of personal space (sharing their space with others) and the diminution of their freedom of movement. This is because they consider other consumers as an integral part of the service experience (Eastman & Land, 1997; Holt, 1995; Price, Arnould, & Deibler, 1995; Sherry, 1998; Wann, Royalty, & Rochelle, 1999). Such valuation of dense and crowded situations is clearly illustrated in the Goulding, Shankar, and Elliott (2002) study of rave parties. Under a multidimensional, perception-based view of density, it is posited that:

H1: In a dense leisure situation, there is a positive relationship between the perceived number of individuals and the affective evaluation of the service setting.

H2: In a dense leisure situation, there is a negative relationship between (a) personal space, (b) freedom of movement, (c) privacy, and (d) territoriality and the affective evaluation of the service setting.

H3: In a dense leisure situation, there is a positive relationship between the affective evaluation of the service situation and satisfaction with the service experience.

Culture and Reactions to Crowd: Are We Different?

Extensive research has been conducted on the impact of culture on privacy (Mexican context with Lewis, 1961; English homes with Kuper, 1953; Samoan lifestyle with Westin, 1970; Elderly in India with Sinha & Nayyar, 2000) and personal-space issues (Arabic, Latin American, and Middle Eastern with Hall, 1966, and Baxter, 1970). In all cases, cultural differences in spatial distancing were found to influence the use of space and the social-interaction style (Hall, 1966; Heimstra & McFarling, 1978). For instance, Arabic, Mediterranean, and Latin American cultures tend to exhibit smaller dis-

tancing and higher levels of contact than their Northern European and Caucasian North American counterparts (Altman & Vinsel, 1977; Baxter, 1970). These findings can be explained by two theoretical accounts based on differences between high- and low-contact cultures and differences between collectivistic and individualistic cultures. According to the proxemic account, high-contact cultures prefer closer interpersonal distances and more interactions than low-contact cultures. Alternatively, the collectivism-individualism perspective views individuals from a collectivistic culture as more eager to create connections with their peers and more likely to seize opportunities that allow for proximate social interactions than individuals from individualistic cultures (Evans, Rhee, Forbes, Allen, & Lepore, 2000). The North American culture is often depicted as the archetypal individualistic and low-contact culture (Altman, 1975; Evans et al., 2000; Markus & Kitamaya, 1991; Park, 1998). In contrast, the Middle Eastern culture, along with the Arabic culture, is generally described as a high-contact culture that promotes collectivistic strivings (Khalidi, 1985; Oyserman, 1993). It is, therefore, reasonable to expect differences in reaction to density between the North American and the Middle Eastern cultures.

Through socialization and enculturation, cultural groups may define their own norms and ranges of acceptance for density. Evans, Rhee, Forbes, Allen, and Lepore (2000), for instance, found that measures of perceived density were often lower in high-contact cultures (e.g., Latin American culture) than in low-contact cultures (e.g., North American culture). Similarly, it is expected that consumers from the Middle Eastern culture (high contact) to perceive the same setting as being denser than would consumers from North America (low-contact culture). In sum, culture is expected to influence the perception of density in addition to moderating the relationship between perceived density and consumers' evaluations of the service setting:

H4: In a dense leisure service situation, North American respondents will perceive lower levels of (a) personal space, (b) privacy, (c) freedom of movement, and (d) territoriality, as well as (e) more individuals than their Middle Eastern counterparts.

H5: In a dense leisure situation, the relationships between the perceived density concepts and affective evaluation will be significantly weaker in the North American sample than in the Middle Eastern one.

METHODOLOGY

Sample

One of the research objectives is to investigate the influence of culture on consumers' reactions to a crowded retail environment. Building on previous work (Hall, 1966; Sanders, Hakky, & Brizzolara, 1985), the level of

analysis adopted in this manuscript is, therefore, the cross-cultural approach. However, as described in previous studies (e.g., Kim, Park, & Suzuki, 1990), "countries" (Lebanon and Canada) were used as a proxy for culture. Intracountry differences may (and do) exist, but it is expected in this study that intercountry differences will account for the greater part of variation in reactions to crowd. This method has been successfully used in similar studies investigating cross-cultural differences (Buda & Elsayed-Elkhouly, 1998; Harcar & Karakaya, 2005; Reynolds, Simintiras, & Diamantopoulos, 2003; Samiee & Jeong, 1994). Additionally, attempts were made to minimize demographic differences between the two samples in order to enhance the validity of the cross-cultural findings. The two different samples were similar on demographic (age, leaving in an urban setting) and cultural determinants (religion, language). Age, for instance, has been identified as a potential influencer of the way individuals react to dense environments (Altman, 1975; Pastalan & Pawlson, 1985). In order to ensure comparable samples with regard to age, undergraduate students were used as respondents in this research. Undergraduate students also had the nonnegligible advantage of being conveniently accessible to the researchers.

The final sample is composed of 226 Canadian undergraduates and 244 Lebanese undergraduates. The Canadian sample was drawn from an English-speaking university in Montreal. All the participants are under 30 years of age; 46.9% are men and 53.1% are women. The Lebanese sample was drawn from an English-speaking university in Beirut. All the participants are under 30 years of age; 66.1% are men and 33.9% are women.

Procedure and Data Collection

Undergraduate students registered in introductory marketing classes were met in their classrooms and asked to fill out a questionnaire. They were then read a short introduction (context definition) and presented with a 30-second video of a busy leisure situation (disco). Previous research (Machleit, Eroglu, & Powell Mantel, 2000) found that videotapes produce valid consumer responses to crowding issues. The leisure situation (disco) was selected on the basis of pretests performed in an earlier data collection using the hedonic shopping values scale (Babin, Darden, & Griffin, 1994). Cues about the service experience were given in a short written scenario that was read and distributed to the participants, insisting on the fact that they had to picture themselves in this situation (*It is Friday night and you are going out in a disco. This short video represents what you see when entering the disco*). After watching the video, respondents were asked to answer questions about density, affective reactions, and satisfaction.

Measures

A self-administered questionnaire was used to gather the data. All the items were measured on a 7-point Likert scale. Several manipulation

checks, such as the level of perceived similarity with the crowd and the leisure content of the situation, were included, along with other measures of general consumer characteristics.

Most items measuring the five density-related concepts were derived from existing environmental psychology studies (Heimstra & McFarling, 1978; Insel & Lindgren, 1978; Machleit, Kellaris, & Eroglu, 1994; Sinha & Nayyar, 2000), although some new items were specifically developed for this research. The affective evaluation of the density level was assessed through the degree of liking of each density-related variable (personal space, privacy, territoriality, freedom of movement, perceived number of people). Satisfaction was measured for the overall service experience as suggested by Oliver (1997) and Machleit, Eroglu, and Powell Mantel (2000). The questionnaire also included sociodemographic measures and an assessment of the overall number of customers in the setting. All the items were adapted to the service situation under study.

RESULTS AND ANALYSIS

Manipulation Checks

In order to control for unwanted method effects and ensure that the two cultures involved in the survey did not differ in their understanding of the stimuli, several checks were performed. There was no significant difference in the hedonic value of the situation between the two cultural groups ($M_{\text{Canada}} = 5.89$ vs. $M_{\text{Lebanon}} = 6.05$; $F(1,467) = 1.655, p = .199$). In addition, respondents in both groups equally rated their perceived similarity with the people depicted in the video ($M_{\text{Canada}} = 5.56$ vs. $M_{\text{Lebanon}} = 5.57$; $F(1,467) = 0.048, p = .823$).

Structural Relationships: Evaluation of the Density-Satisfaction Relationships

Through the use of structural equation modeling, this section seeks to explore the direction and strength of the relationships that tie the various facets of perceived density to consumer evaluations of the service environment. The model hypothesized in Figure 1 is first tested on the overall sample. The goal of this first evaluation is to test whether, in a leisure situation, high density has a positive influence on affective evaluations and satisfaction. In a second round of analyses, the moderating effect of culture is analyzed with the use of multigroup comparative studies.

Preliminary Analyses and Measurement Issues

Prior to specifying the overall model, including causal path relationships, a series of analyses were performed on each of the latent variables used in the model to determine their psychometric properties.

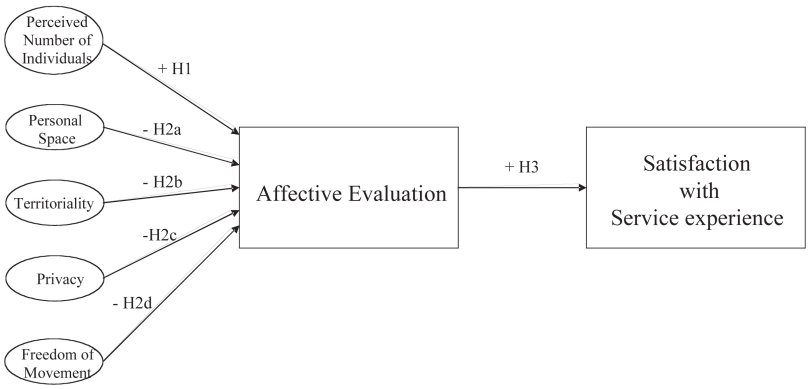

Figure 1. Model of density-satisfaction relationship: Hypotheses.

Results from exploratory factor analyses using the principal-component extraction method suggested adequate dimensionalities and satisfying reliability indicators for each factor present in the model (all Cronbach alphas above 0.73). Moreover, confirmatory factor analyses performed on these latent factors indicated a reasonably good fit to the data and suggest accepting the measurement model and starting the evaluation of the structural model.

Model Evaluation

In this first analysis, the model was applied to the entire sample (469 respondents) to check for overall patterns of relationships (Eroglu & Machleit, 1986; Harrell, Hutt, & Anderson, 1980; Machleit, Eroglu, & Powell Mantel, 2000). The hypothesized model produced a chi-square value of 68.26 with 27 degrees of freedom ($\chi^2/df = 2.52$). The CFI is 0.942, and the RMSEA is 0.07. This supports the good fit quality of the overall model. The EQS standardized estimates of the parameters and their respective t values are presented in Table 1. As shown, all of the structural relationships but one are significant at $p < .001$ (t value > 1.96; Anderson & Gerbing, 1988).

Table 1. Standardized Estimates for the Density-Satisfaction General Model.

Path Tested	Standardized Estimate (T-Value)
Personal space —> Affective evaluation (H2a supported)	–.114 (–2.79)
Privacy —> Affective evaluation (H2c supported)	–.215 (–5.03)
Territoriality —> Affective evaluation (H2b not supported)	NS
Freedom of movement —> Affective evaluation (H2d supported)	–.359 (–7.61)
Perceived number of people —> Affective evaluation (H1 supported)	.350 (8.55)
Affective evaluation —> Satisfaction (H2 supported)	.289 (6.29)

The findings support the existence of an overall positive relationship between perceived density and consumers' evaluations of the hypothetical disco experience. These results are among the first empirical findings to lend support to the positive impact of crowd in a service situation. The results are also inconsistent with the traditional positioning of crowding studies within the realm of negative consequences (Eroglu & Machleit, 1990; Machleit, Eroglu, & Powell Mantel, 2000). Moreover, in addition to the usual measurement of density as the number of individuals in a given space, additional facets of density (perceptual and psychological), such as freedom of movement, personal space, or privacy, are presented and offer additional insights on the way this positive relationship may be triggered. The only density-related concept that does not seem to have a significant impact on the affective evaluation is territoriality. It is, however, important to note that definitions of territoriality include notions of geographical areas, displays of ownership, and protection of a particular territory (Altman, 1975). It may have been difficult for consumers to imagine themselves claiming ownership over a part or the totality of a public place, such as a disco. This may explain the lack of a significant effect of territoriality in the results.

Testing the Potential Moderating Effect of Culture on the General Model

Multigroup analyses were used to compare the general model across the North American and the Lebanese samples.

First, measurement equivalence across the two samples was confirmed through configural and metric invariances (Steenkamp & Baumgartner, 1998). Then, H5 was tested by fitting a structural model in which all the parameters of the causal structure were constrained to be equal across the two samples. The results suggest the release of five of the six constraints, supporting the poor similarity of structural coefficients between the two groups. The only identical path across the two groups is the positive influence of affective evaluation on satisfaction. Once the five nonpertinent constraints were released, the model was reevaluated. The final indicators ($\chi^2 = 86.3$ with 21 df, $\chi^2/df = 4.10$, CFI = 0.918 and RMSEA = 0.072) suggest a fairly good fit to the data and a significant improvement from the fully constrained model. The parameter estimates are presented in Table 2.

A close examination of the results presented in Table 2 allows for the following interpretations and conclusions. First, the effects of four perceived density dimensions (privacy, personal space, freedom of movement, and perceived number of people) on consumers' affective evaluation of a crowded disco are significantly greater in the Lebanese sample than in the Canadian one. Consistent with H5, these results indicate that the positive effect of perceived density on consumers' evaluations of a service setting varies across cultures. Unexpectedly, however, the fifth dimension of perceived density (territoriality) had no effect on Lebanese consumers'

Table 2. Standardized Estimates for the Density-Satisfaction Model in the 2 Cultures.

Path Tested	Lebanese Standardized Estimate (T-Value)	Canadian Standardized Estimate (T-Value)
Personal space —> Affective evaluation	–.336 (–2.9)	–.262 (–2.5)
Privacy —> Affective evaluation	–.415 (–5.03)	–.265 (–2.7)
Territoriality —> Affective evaluation	NS	.150 (2.1)
Freedom of movement —> Affective evaluation	–.559 (–7.61)	–.361 (–3.4)
Perceived number of people —> Affective evaluation	.750 (8.55)	.250 (2.4)
Affective evaluation —> Satisfaction	.289 (2.8)	.286 (2.8)

affective reactions but had a small, though statistically significant, positive (opposite to prediction) influence on Canadian consumers' affective reactions. It seems that, even in a leisure setting, Canadian consumers' inability to define a territory led to a decrease in their liking of the social setting. This finding may be attributed to the higher needs for self-definition and territory in individualistic cultures (Hofstede, 1980).

In addition to moderating the relationship between perceived density and consumers' evaluations of the service setting, culture was also posited to directly influence the levels of perceived density. It was predicted, in H4, that the same setting will be perceived as more dense by Canadian consumers than Lebanese consumers. A series of analyses of variance (ANOVAs) were performed to test H4 and to check for cultural differences in affective evaluations and satisfaction of the service experience.

The results, summarized in Table 3, show that both cultural groups reported some degree of satisfaction with the dense disco setting with a significant difference in the Lebanese consumers, who tend to be more appreciative and more satisfied than their North American counterparts. The results also indicate that Canadian consumers perceived a higher number of people, less privacy, and less freedom of movement than Lebanese consumers. The two groups, however, did not differ in their perceptions of personal space and territoriality. Partially supporting H4, these findings suggest that Canadian consumers tend to perceive the same social setting as being denser (at least some density dimensions) than Lebanese consumers do. This, in turn, seems to leads to lower affective evaluations and satisfaction scores among the Canadians.

CONCLUSION

The presence of other consumers in the service setting drastically affects consumers' overall experience. In fact, in many situations, consumers' evaluations of the service seem partly or totally based on the interactions they have with nonservice providers. The services-marketing lit-

Table 3. Anova Results for Cultural Influences on Density and Outcomes.

	Density	Privacy	Personal Space	Territoriality	Freedom of Movement	Affective Evaluation	Satisfaction
Mean score (Lebanese)	5.02*	5.28*	5.8	4.9	5.19*	5.79*	5.2*
Mean score (Canadian)	6.19	3.8	5.7	4.7	4.3	4.13	4.01
$F_{(1,467)}$	46.24	30.3	.950	1.242	10.64	115.1	26.49
p-value	< 0.0001	< 0.0001	.330	.266	< 0.0001	< 0.0001	< 0.0001

* Significant differences ($p < 0.01$).

erature offers many examples of these co-consumers that may either have a good (Holt, 1995; Price, Arnould, & Deibler, 1995) or a bad (Dunning, Pecotich, & O'Cass, 2003; Edvardsson, 1992; Eroglu & Machleit, 1990; Grove & Fisk, 1997) influence on other customers' experience. The group (crowd) influences have surprisingly been studied in a limited manner within services and, for the most part, to show the negative impact of having too many people in a commercial setting (Eroglu & Harrell, 1986; Eroglu & Machleit, 1990). However, with the actual development and popularity of experiential and hedonistic services as well as growing concerns in leisure research about crowd management (Manning & Valliere, 2001; Stewart & Cole, 2001), the role of the crowd in services needs a more careful and detailed attention. This study demonstrates that contextual issues are key aspects of crowd studies. Indeed, through the choice of a particular leisure setting, this study empirically supports a potential positive impact of crowds in the service experience. Moreover, through the introduction of culture as a potential moderator of crowd processing, this study reinforces the importance of socialization and enculturation issues in the assessment of a crowd. Several of the findings show that culture may have a dual impact on crowd processing. First, culture is pervasive to individuals' lives and alters their perceptions of common daily situations involving crowds. Moreover, culture moderates the impact of these perceptions on overall evaluations and affective reactions.

The North American and the Middle Eastern cultures, operationalized in this research, respectively, through Canada and Lebanon, present specificities that may explain the moderation effect found in this article. First, as part of larger cultural entities, these nations are both considered as opposites on the individualism/collectivism (Hofstede, 1980) and the high/low contact (Hall, 1966) continua. Second, historical and geographical perspectives on shopping habits (Klaffke, 2003) suggest that some cultures are more used and equipped to negotiate and deal with crowd and noise than others (El Sayed, Farrag, & Belk, 2004; Feinberg & Meoli, 1991). Shopping in busy markets (bazaars or souks) are landmarks of several cultures (Middle East, Arabic), and succeeding at finding the best product

at the best price is often revered in several cultures (Klaffke, 2003). However, despite the cultural differences noticed in this research, cultures are constantly changing and adapting to new retail environments. For instance, North American consumers sometimes dive into crowded and nonorganized settings to find their reward (product) (Brooks & Terhune, 2003), and Middle Eastern consumers often move away from their traditional markets for the organized shelves of shopping malls (Aslanyurek, 1999). These differences suggest that countries belonging to similar cultural groups than the one depicted in the article may also reproduce a similar pattern of results.

On the other hand, these findings may also be partly explained by more endemic differences due to specific national differences between Canada and Lebanon. Geographic differences may partially contribute to explain these results. Indeed, Canada is one of the largest countries in the world, somewhat larger than the United States (9,093,507 sq km), whereas Lebanon is about 0.7 times the size of Connecticut (10,230 sq km). Moreover, Canada's population is about 31.6 million, whereas Lebanon's is 3.8 million. The open space and relatively low density of population found in Canada certainly partially contributes to a lower tolerance level for crowds for Canadians than their Lebanese counterparts. Furthermore, Lebanon had to deal with a civil war from 1975 to 1991. This urban war triggered massive emigration, as well as very poor and crowded living conditions for the people who stayed in Lebanon. The absence of freedom had a strong impact on a whole generation, who appreciate now any piece of freedom or space that they can have (Rawwas, Patzer, & Vitell, 1998). These country-specific issues are important to better understand these results and truly represent the differences between the two countries at stake, but they also are limitations to any larger cross-cultural generalizations regarding reactions to crowding.

Nevertheless, this study signals to practitioners and researchers that cultural differences should be considered and even used when dealing with crowding issues, but it also offers future research directions, such as measurement issues of psychological components of density or even a typology of conditions known to influence crowd perceptions. There is an urgent need for a better understanding of crowding issues. This research contributes to the conceptual development and understanding of this concept.

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