

How do consumers react to store social atmosphere? An analysis of the mediating role of transactional satisfaction: Abercrombie & Fitch store case study

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**How do consumers react to store social atmosphere?**  
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Abstract:

The recent retail literature points out the social dimension of physical shopping. This research examines the mediating effect of customer transactional store satisfaction between store social atmospheric variables (crowding effects and store perceptions about employees) on the one hand and customer word-of-mouth intention and intention to visit on the other. We propose a conceptual framework which introduces four research hypotheses. A survey of 400 customers of Abercrombie & Fitch was carried out in France. The data was analyzed with structural equation modelling and a bootstrapping test and revealed that four of our research hypotheses were supported, namely that satisfaction mediates the effect of the social atmosphere (crowd and employees) on the intention to visit and word-of-mouth. Overall, our findings clearly support the mediating role of customer store transactional satisfaction between store social atmospherics and customer word-of-mouth intention and intention to visit.

*Keywords: Store social atmospherics; store transactional satisfaction; intention variables*

*Track: Retailing and omnichannel management*

## 1. Introduction

Omnichannel shopping has completely revolutionized the retail industry and questions the role of physical stores (Hagberg, Jonsson, and Egels-Zandén, 2017). Many recent research studies have focused on the implications of digitalization for physical retail (Bell, Gallino, and Moreno, 2016; Botschen & Wegerer, 2017) and emphasize the social role of physical stores (Alexander & Blazquez Cano, 2020; Helm, Kim, and Van Ripper, 2020; Huré, Picot-Coupey, and Ackermann, 2017). Physical stores represent the main touchpoint of face-to-face interactions between the brand and its customers “in a relationship that goes beyond a simply commercial one” (Antéblian, Filser, and Roederer, 2014, p. 99). Therefore, it is interesting to understand how a store’s social cues might affect consumers responses. Previous retail literature has examined how store environment cues impact customer perceptions or responses toward the store, such as customer perceived value or patronage (Baker, Parasuraman, Grewal, and Voss, 2002), word-of-mouth (Loureiro & Ribeiro, 2014), merchandise value (Zeithaml, 1988), store choice (Bender, 1964), store intention to visit and even love of stores (Koo & Kim, 2013).

Hence, various store dimensions, both physical and nonphysical, defined as store atmospherics have been identified as critical to understanding customer perceptions and behaviors toward the store or toward the retailer. Yet, a close examination of the literature reveals a dearth of knowledge as to how consumer perceptions of social store characteristics, *i.e.* customer perceptions of employee and crowd, impact customer word-of-mouth intention toward the store and store intention to visit. In particular, the effect of social behavior cues enacted by the store on customer satisfaction with the store and subsequent variables call for additional empirical validations. In addition, the mediating role of satisfaction between store social atmospheric cues and word-of-mouth intention or intention to visit remains unexplored.

The originality of this research concerns the inclusion in the same conceptual model of: 1) two social variables of the atmosphere (crowd and employees), previously studied separately; 2) transactional (store satisfaction) and relational (word-of-mouth intention and intention to visit) variables. Based on the stimulus – organism – response (SOR) model, this research aims at filling this gap and investigates the respective effects of store social atmospherics on customer satisfaction, word-of-mouth intention and intention to visit. Specifically, based on the stimulus – organism – response (SOR) model, this research examines how social store atmospheric cues (S), *i.e.* employees and levels of crowding, impact customer satisfaction toward the store (O) and then word-of-mouth intention (R) and

intention to visit (R). As for store employee cues, it focuses on six store employee key dimensions: friendliness, appearance, knowledgeable, availability, attention and warmth. In a similar fashion, we have included the customer's perception of store crowding as a determinant of satisfaction, word-of-mouth intention and intention to visit. Importantly, this study analyses the mediating role of customer store satisfaction between store social atmospherics, word-of-mouth intention and intention to visit. To do so, we conducted a survey on a sample of 420 Abercrombie & Fitch customers in France in 2019. We have analyzed the data using structural equation modelling (EQS 6) and a bootstrapping test.

The paper is organized as follows. First, we propose a theoretical framework, which introduces four research hypotheses. We then combine both structural equation modeling and regression test using SPSS to analyse the interrelationships within the proposed conceptual framework. We further discuss the results as well as the implications, limitations, and future avenues for research.

## **2. Theoretical Framework and Hypotheses**

Kotler (1973) was the first to argue that store environments can be consciously designed to produce emotional effects in consumers through the use of "atmospherics" and that this can enhance their purchase probabilities. Extending Kotler's work, Turley and Milliman (2000) developed a taxonomy of five categories of atmospherics: (1) external variables, (2) general interior variables, (3) layout and design variables, (4) decoration variables and (5) human variables. So far, research has paid little attention to social atmospherics: human variables are often omitted when it comes to adopting a multisensory approach (Spence, Puccinelli, Grewal, and Roggeveen, 2014). Store social factors, referring to human issues in the store and concerning both the vendors and the consumers (Hosseini, Mosayebi, and Khorram, 2013) include in-store crowd cues but also other customers and personnel characteristics. To our knowledge, the influence of other shoppers and the influence of retail employees have never been tested empirically together. Store social factors include the influence of other shoppers (customer crowding or density, customer characteristics) and the influence of retail employees (personnel characteristics and uniforms) on shopping behavior. To our knowledge, these two sub-categories have never been tested empirically together. Research has highlighted that social factors influence consumer emotions, evaluations and behaviors (Baker et al.; Hosseini et al., 2013). Precisely, the perceptions the customer has of the store employees were found to impact customer store satisfaction, an emotional response, and

customer word-of-mouth intention and intention to visit, both attitudinal responses, which are good predictors of future behavior. However, though retail patronage depends on numerous factors (Baker et al., 2002), such as merchandise quality (Darley & Lim, 1993) and store atmosphere for example (Grewal, Baker, Levy, and Voss, 2003), interaction between customers and employees has been identified as the most important driver (Dabholkar, Thorpe, and Rentz, 1996). As for crowding effects, research has outlined that customer perception of the crowd can alter customer use of in-store information, satisfaction with the store and enjoyment of the shopping experience (Eroglu & Machleit, 1990; Yüksel & Yüksel, 2007). As mentioned earlier, this research aims at examining the mediating role of satisfaction between store social atmospherics and customer responses of word-of-mouth intention and intention to visit. Both the relational and retail literatures have stressed the direct and positive effect between customer satisfaction and word-of-mouth intention and between customer satisfaction and intention to visit (Oliver, 2014). Consumer satisfaction has also been shown be a strong predictor of intention to visit the store, attitudinal or behavioral intention to visit (Baker et al., 2002; Oliver, 2014). Research has shown that store atmospherics could trigger favorable perceptions, positive word-of-mouth intention, increased buying, patronage and intention to visit among others (E.g. Eroglu & Machleit, 1990; Donovan & Rossiter, 1982; Spence et al., 2014). Based on this previous research, we hypothesize that:

**H1.** Customer transactional store satisfaction will mediate the relationship between customer perception of the employees and customer word-of-mouth intention.

**H2.** Customer transactional satisfaction will mediate the relationship between customer perception of the employees and customer intention to visit.

In a similar vein, because customer perception of the crowd was found to have a direct effect on customer satisfaction with the store, and relying also on the retail literature, we hypothesize that:

**H3.** Customer transactional store satisfaction will mediate the relationship between the perception of the crowd and word-of-mouth intention.

**H4.** Customer transactional store satisfaction will mediate the relationship between the perception of the crowd and customer intention to visit.

### 3. Material and Method

We chose to survey Abercrombie & Fitch customers in France for several reasons. The first is that its social atmosphere is very important and strategic within its sensory and experiential offer. Indeed, employees and other shoppers are among the atmosphere variables most noticed by consumers of this store. The second is because this brand has not yet been studied in the sensory marketing literature, while it is often considered as a pioneer in experiential marketing by both researchers and practitioners. The sample consisted of 422 customers of the Abercrombie & Fitch store in France. This sample is diversified in terms of socio-demographic and professional characteristics and needs (40.4% men; 59.6% women; average age = 25; students, executives, intellectual professions, employees, workers; experiencing experiential and/or functional needs). The variables were measured based on scales from previous research (see table 1).

Table 1: Statistics of the measurement scale

Variable	Items	$\Lambda_i$ EFA ; $\Lambda_i$ CFA	KMO/Bartlett/ Variance	Reliability, Validity, GOof Fit
Employees	The employees of this store are elegant	0,724 ; 0,785	<i>KMO</i> = 0,880 <i>Bartlett</i> = 1388,014 ; $p \leq 0,000$ <i>Variance</i> = 66%	Cronbach's $\alpha = 0,89$ $\rho_{\text{Joreskog}} = 0,89$ $\rho_{\text{vc}} = 0,59$ $\chi^2/df = 5,12$ ; Comparative Fit Index ( <i>CFI</i> ) = 0,95 ; Normed Fit Index ( <i>NFI</i> ) = 0,94 ; Bentler-Bonett Non-Normed Fit Index ( <i>NNFI</i> ) = 0,91; Root RMSEA = 0.073 ; Standardized RMR ( <i>SRMR</i> ) = 0,042
	The employees of this store are warm	0,819 ; 0,757		
	The employees of this store are attentive	0,863 ; 0,852		
	The employees of this store are knowledgeable	0,828 ; 0,756		
	Employees of this store are available	0,814 ; 0,804		
	The employees of this store are friendly	0,817 ; 0,651		
Crowd	There are a lot of people in this store	0,836 ; 0,981	<i>KMO</i> = 0,500 <i>Bartlett</i> = 192,126 ; $p \leq 0,000$ <i>Variance</i> = 70%	Cronbach's $\alpha = 0,75$ $\rho_{\text{Joreskog}} = 0,79$ $\rho_{\text{vc}} = 0,67$
	This store is crowded with too many people	0,836 ; 0,624		
Satisfaction	I was satisfied with my visit to this store	0,822 ; 0,680	<i>KMO</i> = 0,700 <i>Bartlett</i> = 555,844 ; $p \leq 0,000$ <i>Variance</i> = 76,6%	Cronbach's $\alpha = 0,84$ $\rho_{\text{Joreskog}} = 0,85$ $\rho_{\text{vc}} = 0,60$
	Choosing to go to this store was a good decision	0,892 ; 0,839		
	I had a great idea when I decided to visit this store	0,909 ; 0,902		

Variables	Items	Statistics ( <i>M</i> ; <i>SD</i> )
Intention to visit	I will likely return to this store	5,12 ; 1,603
Word-of-mouth intention	It is likely that I would recommend visiting this store to those around me (friends, colleagues...)	4,98 ; 1,594

The questionnaire mentioned the instructions, questions about the perception of the crowd and employees, the individual profile of the consumer, the intention to visit, the word-of-mouth intention, and the participant satisfaction with the store. We used 7 level Likert scales to maximize variance. Exploratory factorial analysis methods (EFA) were used in principal components under SPSS and confirmatory methods (CFA) under EQS (maximum likelihood structural equation methods). The measurement model chosen is tested based on the recommendations of Churchill (1979), Gerbing and Anderson (1988), and Bentler (1995). The results indicate that all measurements are one-dimensional, reliable (all Cronbach's  $\alpha > 0,7$ ; all  $\rho_{Joreskog} > 0,7$ ), valid (all  $\rho_{vc} > 0,5$ ), and fit the data properly. The correlations of the items with the constructs are good (all  $\lambda_i > 0,7$ ). These measurements were used for the final test of the structural model to test all the hypotheses. In order to test the relevance of the aforementioned mediation hypotheses, we used the regression method under SPSS 25 performed according to the PROCESS macro (Model 4) of Hayes (2018), with 5000 bootstraps. This procedure is appropriate because the hypotheses include the quantitative independent variables X (perceptions about employees and crowd), a quantitative mediator variable M (satisfaction), quantitative dependent variables Y (intention to visit, word-of-mouth intention). The number of bootstraps at 5000 and the level of the 95% confidence interval are considered.

#### 4. Results

Our results show that perceptions about employees has a significant and positive effect on satisfaction ( $b = 0,67$ ;  $t = 17,57$ ;  $p < ,01$ ). Controlling for the perceptions about employees variable, the effect of satisfaction on the intention to recommend the store visit is significant and positive ( $b = 0,93$ ;  $t = 12,77$ ;  $p < ,01$ ). The direct effect of perceptions about employees on the intention to recommend the store is significant ( $b = 0,28$ ;  $t = 3,87$ ;  $p < ,01$ ). The indirect effect of perceptions about employees on recommending a store visit through satisfaction is significant and positive ( $a \times b = 0,63$ ), with a 95% confidence interval excluding 0 ( $CI = [0,497 \text{ to } 0,775]$ ). Thus, hypothesis H1 is accepted. Perceptions about

employees has a significant and positive effect on satisfaction ( $b = 0,66$ ;  $t = 17,62$ ;  $p < ,01$ ). Controlling for the perceptions about employees variable, the effect of satisfaction on visit intention is significant and positive ( $b = 0,94$ ;  $t = 12,02$ ;  $p < ,01$ ). The direct effect of perceptions about employees on visit intention is not significant ( $b = 0,16$ ;  $t = 2,08$ ;  $p < ,01$ ). The indirect effect of perceptions about employees on visit intention through satisfaction is significant and positive ( $a \times b = 0,63$ ), with a 95% confidence interval excluding 0 ( $CI = [0,468 \text{ to } 0,785]$ ). Thus, hypothesis H2 is accepted.

Crowd perception has a significant and positive effect on satisfaction ( $b = 0,34$ ;  $t = 7,40$ ;  $p < ,01$ ). Controlling for the crowd perception variable, the effect of satisfaction on the intention to recommend the store visit is significant and positive ( $b = 1,08$ ;  $t = 18,22$ ;  $p < ,01$ ). The direct effect of crowd perception on the intention to recommend the store is not significant ( $b = 0,08$ ;  $t = 1,35$ ;  $p > ,01$ ). The indirect effect of crowd perception on recommending a store visit is found to be significant and positive ( $a \times b = 0,37$ ), with a 95% confidence interval excluding 0 ( $CI = [0,247 \text{ to } 0,491]$ ). Thus, hypothesis H3 is accepted. Crowd perception has a significant and positive effect on satisfaction ( $b = 0,35$ ;  $t = 7,57$ ;  $p < ,01$ ). Controlling for the crowd perception variable, the effect of satisfaction on the intention to visit the store is significant and positive ( $b = 1,05$ ;  $t = 16,82$ ;  $p < ,01$ ). The direct effect of crowd perception on store visit intention is not significant ( $b = 0,02$ ;  $t = 0,33$ ;  $p > ,01$ ). The indirect effect of crowd perception on the intention to visit the store is significant and positive ( $a \times b = 0,37$ ), with a 95% confidence interval excluding 0 ( $CI = [0,248 \text{ to } 0,498]$ ). Thus, hypothesis H4 is accepted.

## **5. Conclusion, Implications, Limitations and Future Research**

This research aimed at examining the effects of store social atmospherics (customer perceptions of employees and the crowd) on customer satisfaction, word-of-mouth intention and intention to visit and more specifically, the unexplored mediating role of customer store transactional satisfaction between store social atmospherics and the intention variables. This research makes several contributions. Our results clearly validate the four hypotheses by demonstrating that: (1) both social atmospherics are determinants of customer store satisfaction and of word-of-mouth intention and intention to visit; (2) the mediating role of satisfaction in the effect of these store social atmosphere variables and the two intention variables. These results, obtained in the case of a store not studied until now, are an additional contribution to the sensory marketing literature and may be of interest to practitioners. Our

results confirm the relevance of the SOR paradigm of Mehrabian and Russell (1974) according to which atmospheric factors can influence the internal states of the consumer which in turn can influence approach reactions (versus avoidance). They also confirm the relevance of Kotler's model (1973). They also converge with the recent literature on omnichannel retailing which points the social aspects of physical shopping.

This research has also important managerial implications. It confirms the strategic role of the social atmosphere (employees, crowd) which are found to impact on customer word-of-mouth intention and intention through their transactional satisfaction with the store. It shows that practitioners will have to improve the social environment (crowd and employees) of their stores; the objective is to improve the satisfaction of their customers and encourage them to visit these spaces in the future and recommend the visit to those around them. Indeed, due to digitalization, consumers hold the power to choose, among a wide variety of options and touchpoints, the one that best fits their needs. Retailers have to give them solid reasons to come to their physical stores. As many research studies point out, the in-store consumer experience must emphasize social connections, communication and interaction, legitimizing the role of physical stores as “cornerstones of society” (Helm et al., 2020). However, this can only be done if the staff is well perceived or if personal spaces are preserved (*ibid*). Huré et al. (2017) argued that practitioners should encourage dialogue and social interactions between employees and consumers as well as between consumers in their stores in order to fulfill consumers need for connection and the value of social learning. To achieve this, they have to offer an adequate social atmosphere, which means elegant, warm, available, knowledgeable, friendly and attentive employees but also a “controlled” crowd. Our research suggests managers should monitor store transaction satisfaction carefully, since it reflects consumers’ perceptions of the social atmosphere.

Though promising, this research presents some limitations, which pave the way for future research. First, we selected only two social atmospheric cues. Second, we focused our research on one single store. Consumers have reported their evaluations for one store only. Additional studies for the same brand at different locations or for different brands are necessary to increase the external validity of our results. Finally, it could be interesting to adopt a multisensory perspective by testing various sets of atmospherics (including social ones), evaluating their congruence and how it affects store satisfaction and relational variables. Finally, other mediating variables (such as overall store rating, immersion, emotional states) and dependent variables (such as spending, social interactions, loyalty) should be investigated.

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