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Do store atmosphere and playfulness matter during the ongoing pandemic crisis?

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Abstract

The purpose of this research is to check whether store atmosphere and playfulness matter during the ongoing pandemic crisis. To fulfil this purpose, we utilized an online self-administered survey in Greece using pretested scales from past research. The sample consisted of 400 adult consumers with recent experience in store settings. Findings revealed that store atmospheric cues remain influential in terms of experiential value and more specifically in terms of playfulness or hedonic value during the pandemic. However, an adjusted mix of atmospheric cues is important to trigger playfulness such as display, music, and color. Moreover, playfulness was proven to be a very strong precursor of repurchase intentions. Regarding the originality and value of this research, this study is the first to explore the antecedents and effects of playfulness on physical stores during the pandemic. As a result, a mix of atmospheric cues are proposed to strengthen playfulness, which is very important during the pandemic to outcome favorable behavioral intentions.

Introduction

Store atmospherics have been an over-researched topic in the last thirty years, unveiling various aspects of consumer behaviour (Gardner and Siomkos, 1986; Jalil et al., 2016; Singh et al., 2014; Blazquez et al., 2019). However, during the last two years of the COVID-19 crisis, most of the academic research has focused on virtual shopping and digital marketing strategies as a counter measure for retailers to adjust to reality (Mondol et al., 2021). However, according to Szymkowiak et al. (2021), store retailers need not to neglect their physical stores and stressed the importance of perceived in-store infection threat as a disruptor that has changed consumer behavior. Similarly, consumer experiential value is a driver of favorable behavioral intention and suggests a competitive advantage for visual retailers in terms loyalty (Muhammad et al., 2014). Since consumer behavior has shifted to necessary interaction and limited time in the physical stores (Szymkowiak et al., 2021), it is vital to explore whether experiential value and playfulness as a hedonic value preposition still plays an important role for retailers. This research is the first to explore the impact of atmospheric conditions on playfulness and whether playfulness drives repurchase intentions. The structure of this paper is the following: in the literature review and methodology sections the authors outline the conceptual framework and justify the validity of the research method. In the findings section, we present our evidence, using multiple and simple regression analysis. The conclusion and limitations are presented right after.

2. Literature Review

2.1 Store atmospherics

Store atmospherics suggest a plethora of conditions impacting feelings and experience of customers during decision making process (Hussain and Ali, 2015). Positive feelings during store encounters generate positive

perceptions of in-store services, leveraging perceived quality and value (Jalil et al., 2016). According to Jalil et al. (2016), this includes retail design and layout which in turn generates strong emotional effects and attitudes which are important to forge strong behavioral intentions. Atmospheric stimuli are imperative to increase the consumer's time inside the shop as a precursor of purchase intentions, customer satisfaction and favorable repurchase intentions (Hussain and Ali, 2015). Purchase experience on the other hand is directly and positively affected by atmospheric cues such as music, scent, lighting, color, cleanliness, temperature, and in-store display (Singh et al., 2014). Hence, the afore-mentioned atmospheric variables are expected to facilitate the formulation of customer experiential value, suggesting a mediating factor for favorable behavioral outcomes (de Farias et al., 2014).

2.2 Customer experiential value

Customer experiential value concerns the value generated at the entire touchpoints via interactions with front-line employees and other customers and encounters with processes and physical evidence (de Farias et al., 2014). Theatrical retail aspects, along with entertainment, fun and higher levels of value co-creation also provide basic means of experiential value improvements (Keng et al., 2007). According to Holbrook (1994), customer experiential value ranges from intrinsic to extrinsic, reactive to active as well as from other to self-oriented customer experiential value.

Extrinsic value in a shopping context entails the satisfaction of utilitarian needs, whereas intrinsic experiential value includes playfulness and other hedonic aspects of in-shop experience (Keng et al., 2007). As for the second sphere of value, active value reflects the efficient use of store resources to generate satisfaction, whereas reactive value is related to the positive effect of the retailer's physical environment, or the positive feelings produced via positive interactions with front-line personnel (Holbrook, 1994). The current study focuses on the under-researched active and intrinsic customer experiential value, which is also known as perceived playfulness. According to Kim (2002), playfulness includes entertainment, appeal to five senses, instant gratification, window shopping, social interaction, people watching and escaping from routines. According to de Farias et al. (2014) playfulness is hedonic in nature and is closely related to favorable behavioral intentions.

2.3 Behavioral outcomes

The basic behavioral outcomes related to a positive in-store experience comparing to an expected shopping experience include positive attitudes and feeling towards the retailer deriving from high overall quality perceptions (Singh et al., 2014). In case perceived quality is equal or greater than the expected quality, customer satisfaction is imminent forging favorable behavioral intentions (Holbrook, 1994). The latter include higher levels of purchase and repurchase intentions, higher levels of customer loyalty (both cognitive and behavioral), higher share of wallet as well as positive word of mouth, which is the best advertising for the retailer (Jalil et al., 2016). However, during the pandemic and because of the increased in-store infection threat, it is questionable whether store atmospherics continue to produce hedonic value and whether playfulness is still positive to favorable behavioral outcomes. In this research we explore the direct effects of playfulness on repurchase intentions.

Hence, we provide the following hypotheses:

H₁: Cleanliness is positively associated to Playfulness

H₂: Music is positively related to Playfulness

H₃: Scent positively affects to Playfulness

H₄: Temperature positively impacts Playfulness

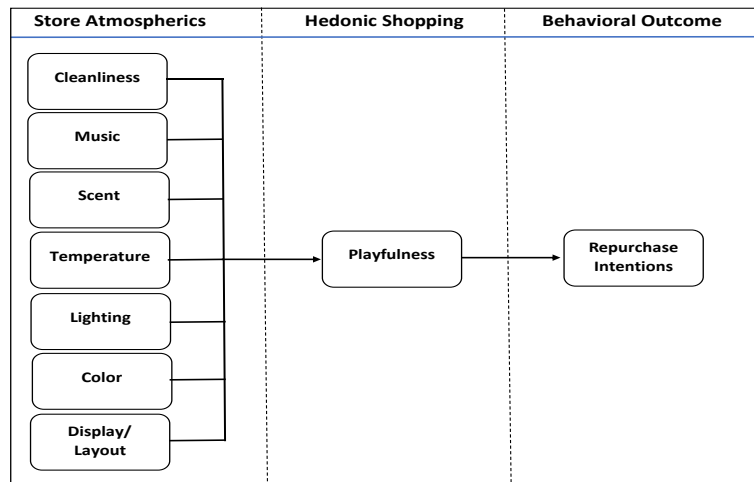
H₅: Lighting is positively associated to Playfulness

H₆: Color is positively related to Playfulness

H₇: Display/layout positively affects to Playfulness

H₈: Playfulness positively impacts Repurchase Intentions

Figure 1 Conceptual Framework



3. Methodology

In the current research, a computer-based self-administered survey was generated to collect data via a positivism approach. We used this method since data collection during the pandemic is restricted due to measures and social distancing. To limit error of measurement, Likert-based constructs were generated to additionally facilitate a quick and comprehensive process. Regarding the sampling process, 458 adult retail customers agreed to participate the survey during November 2021 via a snow-ball method, which resulted in a gathering of a convenience sample. Store visitors had to memorize and recall their most recent visit to a retailing physical site. 400 out of 458 store visitors had a recent experience and they properly completed the survey. Pretested scales that were used by Hussain and Ali (2015) during their past research were used to measure store atmosphere cues such as cleanliness, music, scent, temperature, lighting, display/layout, and repurchase intentions. As for playfulness, measurement was done via the adjusted scale of Mathwick et al. (2001). Regarding the sample’s demographics, 28.5% aged between 18 and 25 years old, 36.0% belonged to the age group 26-35 and 17.0% stated they aged between 36 and 45. Participants aged between 46 and 55 years old accounted for a total of 11.0%. The rest 7.5% of the participants stated they were 56 years old or older. As far as the gender of the participants was concerned, 56.4% were female and the rest 43.6% stated they were males. Regarding the analysis, SPSS V.21 helped researchers to analyze data using factor analysis, Cronbach’s alpha, and multiple regression analysis. To evaluate the measurement model, exploratory factor analysis and Cronbach’s alpha were used. Table 1 below illustrates reliability and validity of constructs. These figures were found well above minimum threshold since all the standardized factor loadings were greater than 0.70. Moreover, Cronbach’s Alpha was utilized to ensure internal validity for the research instrument.

Table 1 Reliability and validity of constructs

Constructs	Original Items	Standardized regression weight	Cronbach’s alpha
Cleanliness Hussain and Ali (2015)	<i>CL1</i> . The cleanliness of the store floor motivates me to buy more	0.89	0.86
	<i>CL2</i> . The clean shelves of retail chain store motivate me to stay more	0.92	
	<i>CL3</i> . The cleanliness of retail chain store attracts me to visit again	0.86	
Music Hussain and Ali (2015)	<i>MUS1</i> . Listening to music creates a relaxed atmosphere while shopping	0.84	0.88
	<i>MUS2</i> . Music in store motivates me to buy more	0.71	
	<i>MUS3</i> . Pleasant environment created by music makes me spend more time in the store	0.84	
	<i>MUS4</i> . The adequate rhythm of the background music makes me comfortable	0.79	
	<i>MUS5</i> . The adequate rhythm of the background music makes me comfortable	0.75	

	<i>MUS6</i> . The existence of background music increases my well-being and comfort	0.83	
Scent	<i>SC1</i> . Scent in retail chain store encourages me to purchase more	0.87	0.84
Hussain and Ali (2015)	<i>SC2</i> . Scent in the store makes me to revisit retail chain store	0.91	
	<i>SC3</i> . Fragrance of the retail chain store makes me to stay more time	0.84	
Temperature	<i>TMP1</i> . The quality of the air conditioning store made my presence in the store comfortable	0.90	0.80
Hussain and Ali (2015)	<i>TMP2</i> . Fully air-conditioned environment makes me comfortable while shopping	0.90	
	<i>TMP3</i> . Retail chain stores with no air conditioning discourage me towards shopping	0.75	
Lighting	<i>LIGHT1</i> . Lighting in retail chain store is fine	0.91	0.85
Hussain and Ali (2015)	<i>LIGHT2</i> . The lighting in the store is pleasing to the eyes, and makes me to stay more	0.58	
	<i>LIGHT3</i> . Good color of lighting attracts me towards products	0.88	
	<i>LIGHT4</i> . The lighting of the store makes things more visible and attractive to me	0.91	
	<i>LIGHT5</i> . The lighting in the area of products allows me to evaluate the quality of the product	0.68	
	<i>LIGHT5</i> . The different lighting used in each area inside the store is important	0.68	
Color	<i>COL1</i> . The color of retail store is fine	0.87	0.87
Hussain and Ali (2015)			
	<i>COL2</i> . The store color creates a positive image in my mind	0.92	
	<i>COL3</i> . The color of retail store makes positive perception in my mind	0.88	
Display/Layout	<i>DISP1</i> . I tend to buy more when I come across attractive and impressive displays	0.76	0.86
	<i>DISP2</i> . There is a sufficient display of in-store information	0.74	
Hussain and Ali (2015)	<i>DISP3</i> . Display motivates me to look at the products more critically	0.80	
	<i>DISP4</i> . The retail chain store display allows me to see displayed products clearly	0.77	
	<i>DISP5</i> . The creative and systematic arrangement of products in the retail chain outlet helps me in the selection of product	0.77	
	<i>DISP6</i> . I like the decoration and shopping environment	0.74	
Playfulness	<i>PLAY1</i> . Shopping at the retail store makes me feel cheerful	0.87	0.89
Mathwick et al. (2001)	<i>PLAY2</i> . I feel happy when I shop at the retail store	0.86	
	<i>PLAY3</i> . Shopping at the retail store makes me forget my troubles	0.81	
	<i>PLAY4</i> . Shopping from the retail store makes my life easier	0.81	
	<i>PLAY5</i> . The product assortment at the retail store fits my needs	0.82	
Repurchase Intentions	<i>RI1</i> . I would like to purchase in the retail chain store	0.88	0.91
Hussain and Ali (2015)	<i>RI2</i> . I would like to shop longer in the retail chain store	0.82	

<i>RI3</i> . I would like to visit the retail chain store again	0.89
<i>RI4</i> . I would like to repurchase in future	0.89
<i>RI5</i> . I would like to tell my family and friends about the retail chain store	0.83

4. Findings

To test all the hypothesized effects stated at the conceptual framework, regression analyses were generated. More specifically, cleanliness, music, scent, temperature, lighting, and display/layout were imported as independent variables, whereas Playfulness was the dependent variable. ANOVA of the afore-mentioned model indicated a great deal of significance ($p < 0.01$). The research model explained the 48.0% of the total variance of playfulness. As for the direct effects of the research model, cleanliness, scent, temperature, and lighting were insignificant. Hence, these atmospheric cues have no effect on playfulness and thus, H_1 , H_3 , H_4 & H_5 need to be rejected. The atmospheric variables with the most prominent impact on playfulness were in descending order display/layout ($\beta = 0.33$, $p < 0.001$), music ($\beta = 0.20$, $p < 0.001$) and color ($\beta = 0.20$, $p < 0.005$). Thus, “ H_2 : Music is positively related to Playfulness”, “ H_6 : Color is positively related to Playfulness” and “ H_7 : Display/layout positively affects to Playfulness”, can be accepted at a 95% confidence level. Summarizing, during the pandemic retailers need to focus on the stores’ display and not to neglect the use of music and colors as important cues improving hedonic value provided to customers. As far as the impact of the playfulness itself on repurchase intentions, a simple regression analysis indicated a significant model. More specifically, an impressive figure of adjusted square of 0.60 revealed that playfulness alone explains the 60% of total variance of repurchase intentions. Indeed, the regression analysis indicated that playfulness is strongly and positively associated with repurchase intentions ($\beta = 0.78$, $p < 0.01$) and therefore “ H_8 : Playfulness positively impacts Repurchase Intentions” is accepted at a 95% confidence level. Summarizing, the hedonic customer experiential value is vital for retailers to boost repurchase intentions even during the pandemic. And to achieve so, they need to be careful on the areas of display and other atmosphere conditions such as music and color.

5. Conclusions & Discussion

In this research we unveiled the necessity of atmospherics and playfulness in terms of repurchase intentions under the light of the restrictive measures imposed during the pandemic. In specific, atmospheric variables with the most impact on playfulness were display/layout, music, and color. Regarding display, this finding is in line with the research of Mondol et al. (2021), Hussain and Ali (2015), and Gudonavičienė and Alijošienė (2015). In other words, display and layouts remain the most prominent tactics to bolster consumer experiential value during COVID-19. Concerning color, we indicated positive effects on the hedonic experiential value, a finding that is in line with Mondol et al. (2021), Gudonavičienė and Alijošienė (2015) and contrary to Hussain and Ali (2015). As for the impact of scent, our results indicated lack of importance, which is contrary to Hussain and Ali (2015) and Gudonavičienė and Alijošienė (2015). This finding indicates that scent has lost its importance during the restrictive measures of the pandemic, including wearing mask. As for the lighting and temperature, the findings of this research are in contrast with the results of Mondol et al. (2021), Hussain and Ali (2015) and Gudonavičienė and Alijošienė (2015). Hence, in pandemic scent and lighting has lost its potential. Regarding the effect of music, our findings stressed positive impact on hedonic value (i.e. playfulness) which is in contrast to Gudonavičienė and Alijošienė (2015) and Hussain and Ali (2015). Thus, it seems that during the pandemic some atmospheric cues remain strong, and some others have lost their importance. As for the impact of playfulness on repurchase intentions, playfulness was proven to be a positive vital factor of creating favorable behavioral intentions. This result is in accordance with Vilnai-Yavetz et al. (2021), Spence et al. (2014), Muhammad et al. (2014) and de Farias et al. (2014). Thus, hedonic consumer experiences remain imperative for physical retailing stores to be maintained and adjusted during the pandemic.

6. Limitations and Future Research

Product category choice was limited on garment and shoes stores that represent hedonic product categories. Perhaps, this research could be replicated to include fast moving consumer goods. In addition, Greece was the market where the survey was conducted, and hence the research is limited to the specific characteristics of the Greek culture. Therefore, this research can be replicated to countries with different aspects of culture and perceptions. As future research, we propose the investigation the moderating effects of perceived infection threat as a variable that strengthens or weakens the positive impact for various atmospheric cues.

References

- Blazquez, M., Boardman, R. and Xu, L., 2019. International flagship stores: an exploration of store atmospherics and their influence on purchase behaviour. *International Journal of business and Globalisation*, 22(1), pp.110-126.
- de Farias, S.A., Aguiar, E.C. and Melo, F.V.S., 2014. Store atmospherics and experiential marketing: A conceptual framework and research propositions for an extraordinary customer experience. *International Business Research*, 7(2), p.87.
- Gardner, M.P. and Siomkos, G.J., 1986. Toward a methodology for assessing effects of in-store atmospherics. *ACR North American Advances*.
- Gudonavičienė, R. and Alijošienė, S., 2015. Visual merchandising impact on impulse buying behaviour. *Procedia-Social and Behavioral Sciences*, 213, pp.635-640.
- Holbrook, M.B., 1994. The Nature of Customer Value: An Axiology of Services in the Consumption Experience, 'in Roland Rust, Richard L. Oliver (Eds.), *Service Quality: New Directions in Theory and Practice*, Newbury Park, CA: Sage.
- Hussain, R. and Ali, M., 2015. Effect of store atmosphere on consumer purchase intention. *International Journal of Marketing Studies*, 7(2).
- Jalil, N.A.A., Fikry, A. and Zainuddin, A., 2016. The impact of store atmospherics, perceived value, and customer satisfaction on behavioural intention. *Procedia Economics and Finance*, 37, pp.538-544.
- Keng, C.J., Huang, T.L., Zheng, L.J. and Hsu, M.K., 2007. Modeling service encounters and customer experiential value in retailing: An empirical investigation of shopping mall customers in Taiwan. *International Journal of Service Industry Management*.
- Kim, Y.K., 2002. Consumer value: an application to mall and Internet shopping. *International Journal of Retail & Distribution Management*.
- Mathwick, C., Malhotra, N. and Rigdon, E., 2001. Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment☆. *Journal of retailing*, 77(1), pp.39-56.
- Mondol, E.P., Salman, N.A., Rahid, A.O. and Karim, A.M., 2021. The Effects of Visual Merchandising on Consumer's Willingness to Purchase in the Fashion Retail Stores. *International Journal of Academic Research in Business and Social Sciences*, 11(7), pp.386-401.
- Muhammad, N.S., Musa, R. and Ali, N.S., 2014. Unleashing the effect of store atmospherics on hedonic experience and store loyalty. *Procedia-Social and Behavioral Sciences*, 130, pp.469-478.
- Singh, P., Katiyar, N. and Verma, G., 2014. Retail shoppability: The impact of store atmospherics & store layout on consumer buying patterns. *International journal of scientific & technology research*, 3(8), pp.15-23.
- Spence, C., Puccinelli, N.M., Grewal, D. and Roggeveen, A.L., 2014. Store atmospherics: A multisensory perspective. *Psychology & Marketing*, 31(7), pp.472-488.
- Szymkowiak, A., Gaczek, P., Jeganathan, K. and Kulawik, P., 2021. The impact of emotions on shopping behavior during epidemic. What a business can do to protect customers. *Journal of Consumer Behaviour*, 20(1), pp.48-60.
- Vilnai-Yavetz, I., Gilboa, S. and Mitchell, V., 2021. Experiencing atmospherics: The moderating effect of mall experiences on the impact of individual store atmospherics on spending behavior and mall loyalty. *Journal of Retailing and Consumer Services*, 63, p.102704.