

THE EFFECT OF VISUAL ATMOSPHERIC CUES ON COMFORT BUYING BEHAVIOURS OF CONSUMERS IN RETAIL STORES

AFEEZ BABATUNDE SIYANBOLA

Department of Fine and Applied Arts, Olabisi Onabanjo University, Nigeria
afeezsegun@yahoo.com

NATHANIEL OLUWASEUN OGUNSEYE

Department of Urban and Regional Planning, Olabisi Onabanjo University, Nigeria
townplannerseun@yahoo.com

Abstract

People routinely engage in shopping for discerning needful, self-gratification, hedonic reasons and other factors, which are basically driven by the state of mind. This study investigates the effect of visual atmospheric cues on comfort buying in Shoprite retail stores in Ikeja, Lagos State, Nigeria. Consequently, this study explored the influence of visual atmospheric cues such as colour, typography, images, advertisement and wayfinding signage's on the consumers' behaviours and shopping destinations. Purposive sampling technique was used in the distribution of a structured questionnaire to three hundred (300) shoppers. Both descriptive and inferential statistics were employed for data analysis using Statistical Package for Social Science version 19. The study revealed that consumers often engage in retail therapy, while visual atmospheric cues mediate an enjoyable shopping experience. The study also showed that colour usage on advertisement posters greatly influenced consumers' behaviour as compared to texts and pictures. Further, red and blue colours made significant contributions to aesthetically pleasing retail environment. Shoppers mostly patronize clothing and apparel products when engaging in comfort buying. The regression analysis conducted showed visual atmospheric cues statistically influence shoppers' behaviours ($F=117.882$, $p=0.000$). The study recommended that the psychological desires of potential shoppers must be considered in the planning and designing of a retail environment, an in-depth knowledge of colours moods is essential in the application of colours in a retail environment, and lighting display in a retail environment should be attractive and sensational.

Keywords: Behaviours, Comfort buying, Retail stores, Shoppers, Visual atmospheric cues

JEL Classification: D10, D12

1. INTRODUCTION

Buying is influenced by consumer's desire to acquire goods that improve and enhance their daily lives. People routinely engage in shopping for discerning

needful, self-gratification, hedonic reasons and other factors, which are basically driven by the state of mind. The choice of buying and place do much to enhance shopper's perceived personality. Comfort buying simply implies making purchasing decisions to assuage feelings and enlivens mood. This is also referred to as "retail therapy" or emotional shopping. Retail therapy is casually defined as shopping to alleviate negative moods (Kang, 2009; Rick *et al.*, 2014). This term was first originated from an article published in the *Chicago Tribune* during the Christmas Eve of 1986 as expressed in this sentence "we have become a nation measuring out our lives in shopping bags and nursing our psychic ills through retail therapy" (Schimich, 1986, p. 1). Lee (2015, p. 70) underscores the prevalence of comfort buying in the following quotes by some personalities:

"I always say shopping is cheaper than a psychiatrist." — Tammy Faye Messner, American singer and television personality

"Win or lose, we go shopping after the election." — Imelda Marcos, Previous First Lady of the Philippines

"Everyone needs an occasional dose of retail therapy." — Susan Thurston, Tampa Bay Times staff writer

"Whoever said money can't buy happiness simply didn't know where to go shopping." — Bo Derek, American actress

Comfort buying is relieving and self-gratifying. Personalities are defined and expressed through choice and places of purchase. Perhaps, most purchasing decisions are basically influenced by consumer's mood and state of mind. Researches have established that people derive more satisfaction spending on pleasurable experiences (Kang, 2009, p. 21). The sensory feelings and experiences of a retail environment physical and online stores enrich shopping experience. Improvement of mood stemmed from imagining consumption, experiencing retail environments, being well-treated by sales associates, shopping activity, and purchasing (Kang, 2009, p. 18).

Several studies have shown that most people engage in shopping to improve their mood. Atalay and Meloy (2011) found that among 69 college participants, 43 (62%) reported having purchased an item to treat themselves in the past one week in order to repair their mood; in comparison, 19 (28%) were motivated. A study conducted by TNS Global on behalf of Ebates.com establish that more than half of the Americans admit to engaging in "retail therapy" (Yarrow, 2013). Loureiro *et al.* (2019) explored the effect of consumer-generated media stimuli on emotions and explained that consumer generated media stimuli are positively related to the dimensions of emotions. Douce and Janssens (2013) posited that marketing emphasis has shifted from the product to the creation of consumers' experiences, and sensory marketing seems to be integral to stimulating excitement and pleasure. Kim and Sullivan (2019) emphasized the relevance of emotional branding when developing marketing strategies for fashion brands in a volatile marketplace.

Consequently, the individual's emotional state influences his comportment within the environment, framed as "approach–avoidance" response. Positive emotional response influences sensory stimulation in people in enabling a pleasure-driven experience while shopping. External impulses leverage an emotional attachment between the buyer and the shopping environment. Reid (1785) as cited in Song (2010, p. 3) emphasized the role of external senses in human feelings and perception:

"The external senses have double provinces that make us feel and perceive. They furnish us with a variety of sensations, some pleasant, others painful, and others indifferent; at the same time, they give us a conception, and an invincible belief of the existence of external objects. The feeling which goes along with the perception, we call sensation. The perception and its corresponding sensation are produced at the same time. In our experience we never find them disjoined. Hence, we are led to consider them as one thing, to give them one name, and to confound their different attributes...."

Hong (2016) as cited in Kim and Sullivan (2019, p. 2) noted that purchasing intentions from television advertising are more likely to result from emotional responses as advertisement content. Luomala (2002) identified eight types of therapeutic power stemming from different mood-alleviative consumption activities, which are distraction, self-indulgence, and activation has links with shopping and purchasing. Lee (2015) in a study entitled "The emotional shopper: Assessing the effectiveness of retail therapy" reviewed extant literature on shopping and emotions in proposing a tripartite approach, which provides a holistic attempt at assessing retail therapy works based on three perspectives, which are motivational (the goals and motives that consumers have for shopping); behavioural (the activities consumers engage in during the shopping process); and emotional (the feelings that consumers experience while shopping). Nearly all consumers are motivated by different factors and considerations when making purchasing decision. Consumer behaviours considered to be either mundane or germane form the basis of consumption choices. Evaluative consumption preferences are attitudes biased by elements of rational and perceived irrational preferences. It suffices to note that the presumed irrational factors influencing choices are rational in the mind of consumer when it satisfies a particular urge.

According to Stankevich (2017), the consumer decision making process primarily involves:

- i. **Problem/need recognition:** Consumer recognizes a problem or need. The need is triggered by internal stimuli and rises to a level high enough to become a drive like hunger and food. A need can also be triggered by external stimuli (such as advertisement). For instance, commercials for a new pair of shoes can stimulate a need for a new pair of shoes. Advertisements induced urge can also assuage feelings through cohesive and fascinating atmospheric cues. The shopping experience of

contemporary buyers are made memorable by the ambience of the shopping environment.

- ii. **Choice of products:** At this stage the shopper makes his/her choice of product based on the exciting shopping experience stirred by the ambience of the shopping environment.
- iii. **Evaluation of alternatives:** The comfort buyer is impulsive when making purchasing decision. Considering viable options are less prioritizing when the shopper indulges in shopping to improve his mental state.
- iv. **Post-purchase behaviour:** This is the ability the to deliver the purchased product at buyer's doorstep in good condition within specified time of delivery. In ensuring buyer's satisfaction, relieving buyer's doubts shortly after a purchase about whether it was the right decision.

The other sections of this paper is structured as follows. The existing literature on visual atmospherics and its impact in a retail environment are reviewed while the research was contextualized in related theories. Then the study area was briefly presented with the study methodology. The study results were presented and discussed. This study concluded with implications, recommendations, and future area of research.

2. LITERATURE REVIEW

2.1. VISUAL ATMOSPHERIC CUES IN STORES

Atmospherics refers to the store's physical characteristics that project an image and attract customers (Kotler, 1974; Berman *et al.*, 2007). It is the psychological feeling a customer gets when entering a retail store. Mehrabian and Russell's (1974) as cited in Graa and Dani-elKebir (2012) acknowledged that the impact of situation on behaviour is mediated by emotional responses in the stimulus and response model. The model (Figure 1) states that situational conditions initially generates an emotional (affective, connotative, feeling) reaction, which in turn leads to a behavioural response. Altinigne and Karaosmanoglu (2017) explored the importance of website atmospherics with emphasis on visual complexity in online retailing and concluded that less complex visual atmospherics increases purchasing intention online. Visual atmospherics has become an important aspect in retail design. Floor (2006) asserted that consumers enjoy being inspired by a unique range of experiential shopping environments. Visual atmospherics is basically conceived and implemented to improve shoppability of a retail store. "Shoppability" of a retail environment (Heil, 2018; Singh *et al.*, 2014) leverages an in-store experience that is appealing and immersive. "Shoppability" is classified into two elements which are shopper engagement and purchase conversion (Burke and Morgan, 2017, p. 52). Burke and Morgan (2017) benchmarked retail "shoppability" on five dimensions highlighted in Table 1:

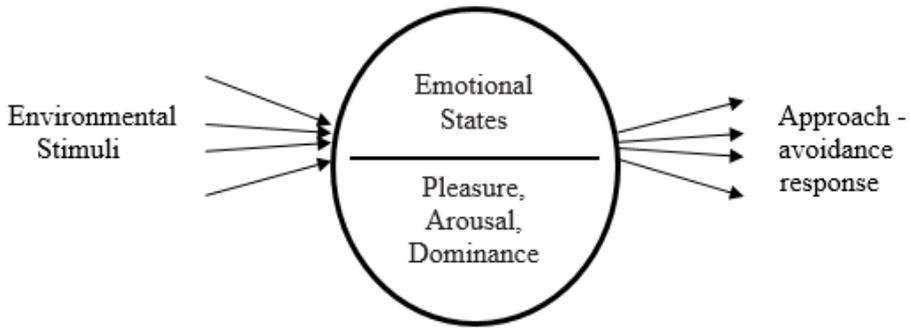


Figure 1. The Mehrabian-Russell model
 Source: Graa and Dani-Elkebir (2012)

Table 1: Dimension of Shoppability

Relevance	The store has in stock the products that shoppers desire at a competitive price
Transparency	The shopping environment makes it easy for customers to see and find desired products and limits visual and physical clutter
Convenience	The store reduces shopping time and effort by providing convenient store access and parking, a quick and easy store layout, and fast and helpful customer service
Assurance	The presentation clearly conveys the unique benefits and value of each product
Enjoyment	The retail experience satisfies the incidental and contextual needs of shoppers by providing unexpected surprises and a comfortable environment

Source: Burke and Morgan (2017, p. 55)

Singh *et al.* (2014) investigated how store atmospherics and layout function as a predictor of consumer behaviour and store performance, the study revealed that visual atmospherics are the most significant factors that impacts customer approach behaviours in a retail environment. Retail store owners and designers focus on creating an appealing retail environment as a core part of their marketing strategies to enhance positive customer’s perception of their brand. Sabir (2014) posited that the elements of store atmospherics include layout design, colour, light, sound, scent within a store. Turley and Milliman (2000) categorized atmospheric cues into five components; external cues (architectural style, surrounding stores); general interior cues (flooring, lighting, colour schemes, music, aisle width, ceiling composition); layout and design cues (space design and allocation, grouping, traffic flow, racks and cases); point of purchase and decoration displays (signs, cards, wall decorations, price displays); and human variables (employee characteristics, uniforms, crowding, privacy). Lighting impact buyer’s mood either positively or negatively. The intensity, colour and positioning of lighting display. Paluchová *et al.* (2016) researched into the impact of visual atmospheric on consumer behaviours in food stores and posited that lighting is the most important visual element that elicits

buyers in a food retail store. Consumers are often discouraged from shopping in a retail store that is not properly illuminated, they prefer strong lighting for safety and easy identification of the goods they are purchasing (Horská & Berčík, 2014, p. 455). Kim and Sullivan (2019) in their study noted fashion retailers successfully provide sensory experiences to consumers in their physical stores. Strang (2015) posited that Lush cosmetic brand employ sensory marketing in creating sight from round shapes of visually attractive products, provision of live plants to illustrate their product ingredients, smell from strong sweet scents and sound from resourceful sale representatives. However, the previous researches in the area of store atmospherics have not dwelt elaborately into the graphic visual components, that constitutes the retail display. The graphic visual components are typography, colours, images, advertisements, signage's and others. This study also investigates the products mostly preferred by shoppers engaging in retail therapy. The specific objectives of this study are to: ascertain the vulnerability of shoppers to comfort buying; determine the influence of store ambience in stimulating consumer buying behaviours; evaluate the impact of colours on comfort buying in a retail store; and determine the line of products that are mostly preferable to comfort buyers.

3. MATERIALS AND METHODS

3.1. STUDY AREA

The study area is the Shoprite Store within the Ikeja City Mall at Alausa, Ikeja, Lagos State in southwest Nigeria. Shoprite Store, located in Ikeja, is a supermarket chain with house-label groceries serving as a meeting point or recreational spot for families and associates. The Ikeja City Mall accommodates other activities like the cinema, restaurants, clothing stores, hairdressing/beauty salon, bars, cafes, banks amongst others.

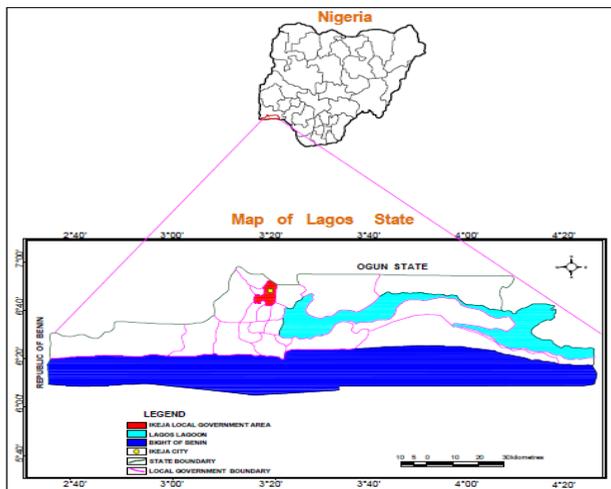


Figure 2. Map of the Study Area

3.2. METHODOLOGY

3.2.1. RESEARCH DESIGN, TARGET POPULATION AND SURVEY INSTRUMENT

This study adopted a survey research design. Apparently, the study is interested in quantitative data. The shoppers at the retail store forms the target population. In order to obtain primary data from the shoppers, a structured questionnaire was designed. The questionnaire borders on issues regarding: Validating people's susceptibility to comfort shopping? what captures shopper's imagination when they go shopping? Which colour shopper find its domination aesthetically pleasing in a retail shopping environment? Which visual elements attract shopper attention in advertisement posters of products displayed in a retail store? and shoppers preferred line of stores whenever you want to enhance your feelings. Also, questions such as if shopper shop for fun, what enlivens shopper mood, and does shopping makes you feel happy? were posed to the shoppers.

3.2.2. SAMPLING PROCEDURE AND SAMPLE SIZE

For this study, the shoppers were purposively sampled. This sampling technique was considered appropriate because there are other activities going on within the Ikeja City Mall where Shoprite Store is situated. A total of 300 copies were distributed and retrieved from the shoppers who are willing to participate in the survey. The study sample (300 shoppers) consisted of 180 females and 120 males.

3.2.3. DATA ANALYSIS

The data collected were collated and analysed using Statistical Package for Social Sciences (SPSS for Windows, version 19). Data were presented using both descriptive (frequency and percentage distribution, mean and standard deviation) and inferential (Multiple regression, ANOVA test, Durbin-Watson Test) statistics.

3.2.4. HYPOTHESIS TESTING

Hypothesis was formulated to determine if relationship exist between store ambience and consumer buying behaviour. The hypothesis tested is stated as follows:

Ho: Visual atmospheric cues does not significantly influence consumer behaviours

H₁: Visual atmospheric cues significantly influence consumer behaviours

4. RESULTS AND DISCUSSIONS

4.1. SHOPPERS' VULNERABILITY TO COMFORT BUYING

Shoppers were asked series of questions of which results of analysis were presented in Table 2. A majority (95.3%) of the respondents confirmed shopping

make them feel happy, almost half (45.3%) stated they shop to enliven their mood, larger proportion (68%) do not shop for fun, and a majority (90.0%) opined that retail store ambience motivates them to make purchase. It can be inferred from the results that shopping makes shoppers feel happy, but this behaviour does not depend on whether they want to catch fun. Also, the retail store environment plays a huge role in motivating shoppers, hence it influences their behaviour. The results in Table 2 confirmed that shoppers engage in comfort buying, which is consistent with findings of studies (Atalay and Meloy, 2011; Kang, 2009).

Table 2: Shoppers' Vulnerability to Comfort Buying

Variable	Category	Frequency	Percent
Does shopping make you feel happy?	Yes	286	95.3
	No	14	4.7
	Total	300	100.0
Do you shop to enliven your mood?	Yes	136	45.3
	No	164	54.7
	Total	300	100.0
Do you shop for fun?	Yes	96	32.0
	No	204	68.0
	Total	300	100.0
Does the ambience of the retail store stimulate you to make purchase?	Yes	270	90.0
	No	30	10.0
	Total	300	100.0

4.2. FACTORS INFLUENCING STORE AMBIENCE IN STIMULATING CONSUMERS' BUYING BEHAVIOURS

The study revealed that visual elements such as texts, pictures and colour usage on advertisement posters of products displayed in a retail store attract the attention of shoppers. Over half (50.7%) of the respondents stated colour stimulate their buying behaviours, 36.0% said pictures and 13.3% claimed texts. Further probe regarding if colourful signage enhances shoppers' experience in a retail environment revealed that majority (86.0%) of the respondents' shopping experience were enhanced by colourful directional signage in a retail environment while 14.0% thought otherwise (Table 3).

Table 3: Influence of visual elements and colourful directional signage

Variable	Category	Frequency	Percent
Which of these visual elements attract your attention in advertisement posters of products displayed in a retail store?	Pictures	108	36.0
	Texts	40	13.3
	Colour usage	152	50.7
	Total	300	100.0
Does colourful directional signage enhance your shopping experience in a retail environment?	Yes	258	86.0
	No	42	14.0
	Total	300	100.0

The results presented in Table 4 indicates that most respondents (64%) stated that advertisement design captures their imagination when they go for shopping, lighting capture the imagination of 18% of the respondents and 13.7% confirmed colours. A marginal proportion (4.3%) identified wayfinding signage as factors with the least influence.

Table 4: Shoppers' interest during shopping in a retail store

Store Ambience	Frequency	Percent
Lighting	54	18.0
Advertisement posters	192	64.0
Colours	41	13.7
Wayfinding Signage	13	4.3
Total	300	100.0

4.3. IMPACT OF COLOURS ON COMFORT BUYING IN A RETAIL STORE

Colours appeal to the viewers and create favourable impact on purchasing decisions with mean and standard deviation of 3.1467 ± 1.72096 respectively. From the result in Table 5, Red and Blue were dominant in creating aesthetically pleasing retail shopping environment as confirmed by 22.3% and 22.0% of the respondents respectively. Other colours in terms of influence are Orange (18.0%), Purple (14.3%), Green (13.3%), and Yellow (10.0%).

Table 5. Colour type and contribution to retail shop ambience

Colours	Frequency	Percent
Blue	66	22.0
Red	67	22.3
Green	40	13.3
Orange	54	18.0
Yellow	30	10.0
Purple	43	14.3
Total	300	100.0

4.4. LINE OF PRODUCTS PREFERABLE TO COMFORT BUYERS

Table 6 shows accordingly the kind of products respondents preferred when engaging in comfort buying. Clothing and Apparel stores are preferred by 50.7% of the respondents while Food and Beverages accounted for the preference by 28.3% of the respondents with mean and standard deviation value of 2.4567 ± 1.06704 . This result may have been influenced by the fact of clothing and food being among the basic needs of man.

Table 6. Line of Products Preferable

Products	Frequency	Percent
Electronics Store	48	16.0
Clothing & Apparel	152	50.7
Phone & Accessories	15	5.0
Food & Beverages	85	28.3
Total	300	100.0

4.5. HYPOTHESIS TESTING

H₀: Visual atmospheric cues does not significantly influence consumer behaviours

H₁: Visual atmospheric cues significantly influence consumer behaviours

The study further conducted a regression analysis to establish the degree of affinity between dependent variable (do you shop for fun?) and independent variables (Which of this colour do you find its domination aesthetically pleasing in a retail shopping environment and Which of these captures your imagination when you go shopping).

Table 7: Multiple Regression Test Results

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.732 ^a	.536	.533	.31918	.536	171.882	2	297	.000	.040

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.022	2	17.511	171.882	.000 ^a
	Residual	30.258	297	.102		
	Total	65.280	299			

a. Predictors: (Constant), Which of this colour do you find its domination aesthetically pleasing in a retail shopping environment, which of this captures your imagination when you go shopping

b. Dependent Variable: Do you shop for fun

As shown in Table 7, the R² value which is a measure of how much of the variability in the outcome is accounted for by the predictors. From the model, its value is 0.536, which indicated that 54% of the total variations is accounted for by the independent variables (predictors). These results, therefore, show that 46% of the variation is caused by factors other than the predictors

From model summary table (Table 7), Durbin Watson statistics shows 0.040, which can be approximate to 1 indicate a strong positive autocorrelation among the variables of the model.

From the ANOVA table (Table 7), which tests the overall regression is a good fit for data, the F-ratio value (171.882) indicates that the independent variables statistically predict the dependent variable, $F(2, 297) = 117.882$, $p(0.000) < 0.5$. The regression model is a good fit of the data. The comparison of the observed significant value (0.000) with the table value (0.05) clearly shows that the observed significant value is less than the table significant value. Hence, the alternative hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected. Meaning that visual atmospheric cues statistically influence the consumer behaviours.

5. CONCLUSION AND RECOMMENDATIONS

This study explored the effects of visual atmospheric cues on comfort buying behaviours of consumers in a Shoprite retail store in Ikeja, Lagos, southwest Nigeria. Undoubtedly, this study has made contribution to literature in the fields of arts, marketing and psychology especially how consumers' behaviours can be influenced by visual atmospheric cues. The study established that shoppers were motivated whenever they engaged in shopping. The consumers' behaviours are majorly influenced by the colour on advertisement posters while a majority of the consumers confirmed colourful directional signage enhances their shopping experience. The study also established that red and blue colours were both dominant, among other colours, in their contribution to aesthetically pleasing retail shopping environment. In this study, it was also discovered that consumers' preference to patronize the Clothing and Apparel store is the primary way through which consumers enhance their feelings. The results of the regression analysis conducted established that visual atmospheric cues statistically influence shoppers' behaviours ($F=117.882$, $p=0.000$).

We have, therefore learned, through this study that the market success of retail stores is basically anchored on consumers' desires, pleasure and satisfaction. Environmental aesthetics stimulate desires and satisfaction. The retail environment is vital in influencing the decisions of shoppers either positively or negatively. Shoppers are enticed and stirred by the visual atmospheric cues in the retail environment. The visual atmospheric cues elicit sensory experience and stimulate distinctive robust impressions that permeate sensory organs of people visiting the environment. Physical convenience of retail environments contributes enormously to customer perception. However, comfort buying is an emotional behaviour that can be positively guided by in-store visual atmospheric cues. Hence, experiential shopping enhances feelings and foster pleasurable attainment of consumption goals.

Based on the study findings, the following recommendations were put forward.

- i. The psychological desires of potential shoppers must be considered in the planning and designing of a retail environment;
- ii. An in-depth knowledge of colours moods is essential in the application of colours in a retail environment;
- iii. The lighting display in a retail environment should be attractive and sensational;
- iv. Advertisements of products available for sale in a retail store should form an integral aspect of in-store décor; and
- v. Functional wayfinding signages are necessary for seamless navigation in a retail environment.

And finally, future research should focus on the impact of visual cues in mediating positive consumers' responses to businesses offering services in area of healthcare and hospitality industries. Future studies should also focus on demographic and cultural applicability of emotional visual brand marketing strategies.

REFERENCES

- Atalay, S. & Meloy, M. G. (2011). Retail Therapy: A Strategic Effort to Improve Mood. *Psychology and Marketing*, 28, 638-659. DOI: 10.1002/mar.20404.
- Altinigne, N., & Karaosmanoglu, E. (2017). The Importance of Web Atmosphericity with Emphasis on Visual Complexity in Online Retailing Based on S-O-R Paradigm. *Journal of Business, Economics and Finance (JBEP)*, 6(4), 348-354. DOI: 10.17261/Pressacademia.2017.767
- Berman, B., Evans, J. R., & Chatterjee, P. (2007). *Retail Management: A Strategic Approach*. Upper Saddle River, NJ.: Prentice-Hall,
- Burke, R. & Morgan, N. (2017). Benchmarking Retail Shoppability. *Journal of Shopper Research*, 2017, 51-59. Available at: <https://www.researchgate.net/publication/315729863>
- Douce, L., & Wim, J. (2013). The Presence of a Pleasant Ambient Scent in a Fashion Store: The Moderating Role of Shopping Motivation and Affect Intensity. *Environment and Behavior*, 45(2), 215–238. DOI: 10.1177/0013916511410421
- Floor, K. (2006). *Branding a Store*. Philadelphia, United States of America: Kogan Page.
- Graa, A. & Dani-elKebir, M. (2012). Application of Stimulus and Response Model to Impulse Buying Behavior of Algerian Consumers. *Serbian Journal of Management*, 7(1), 53-64. <https://doi.org/10.1177/0092070394224002>
- Kang, M. (2009). *Retail therapy: A Qualitative Investigation and Scale Development*. PhD Dissertation, The University of Minnesota. Available at: <http://hdl.handle.net/11299/52142>.

- Kim, Y-K. & Sullivan, P. (2019). Emotional Branding Speaks to Consumers' Heart: The Case of Fashion Brands. *Fashion and Textile*, 62, 1-16. <https://doi.org/10.1186/s40691-018-0164-y>
- Kotler, P. (1974). Atmospherics as a Marketing Tool. *Journal of Retailing*, 49(4), 48-64.
- Heil, K. (2018). How Retail Shoppability Factors into Unplanned Buying. Palmer Retail Solutions Blog. <https://www.palmerretailsolutions.com/blog/how-retail-shoppability-factors-into-unplanned-buying> on 03/10/2020
- Horská, E. & Berčík, J. (2014). The Influence of Light on Consumer Behavior at the Food Market. *Journal of Food Products Marketing*, 20(4), 440-492. DOI: 10.1080/10454446.2013.838531
- Lee, L. (2015). The Emotional Shopper: Assessing the Effectiveness of Retail Therapy. *Foundations and Trends® in Marketing*, 8(2), 69-145. DOI: 10.1561/17000000035.
- Loureiro, S.M.C., Bilro, R. G. & Japutra, A. (2019). The Effect of Consumer-Generated Media Stimuli on Emotions and Consumer Brand Engagement. *Journal of Product and Brand Management*, 29(3), 387-408. <https://doi.org/10.108/JPBM-11-2018-2120>
- Luomala, H. T. (2002). An Empirical Analysis of the Practices and Therapeutic Power of Mood-Alleviative Consumption in Finland. *Psychology & Marketing*, 19(10), 813-836. DOI: 10.1002/mar.10039
- Paluchová, J., Berčík, J., & Neomániová, K. (2016). The Atmosphere and its Impact on Consumer Behaviour in Food Stores. DOI: <http://dx.doi.org/10.15414/isd2016.s10.05>, Available at: <http://www.slpk.sk/elido/2016/dl/9788055215037/files/10/paluchova-et-al.pdf>
- Rick S., Pereira B. D. C. S., & Burson, K. A. (2014). The Benefits of Retail Therapy: Making Purchase Decisions Reduces Residual Sadness. *Journal of Consumer Psychology*, 24(3), 373–380. <https://doi.org/10.1016/j.jcps.2013.12.004>
- Sabir, I. (2014). *Impact of Store Atmospherics on Impulse Buying Behavior Regarding Shopping Goods in Pakistan*. Masters Thesis. GRIN Publishing. ISBN 103668048916
- Schmich, M. T. (1986). A Stopwatch on Shopping. *Chicago Tribune*. December 24. Available at: <https://www.chicagotribune.com/news/ct-xpm-1986-12-24-8604060073-story.html>
- Song, J. (2010). Retail Design and Sensory Experience: Design Inquiry of Complex Reality. Iowa State University, USA. Available at: <http://www.drs2010.umontreal.ca/data/PDF/111.pdf>
- Singh, P., Katiyar N., & Verma, G. (2014). Retail Shoppability: The Impact of Store Atmospherics & Store Layout on Consumer Buying Patterns. *International Journal of Scientific & Technology Research*, 3(8), 15-23. <https://www.ijstr.org/final-print/aug2014/Retail-Shoppability-The-Impact-Of-Store-Atmospherics-Store-Layout-On-Consumer-Buying-Patterns.pdf>

- Stankevich, A. (2017). Explaining the Consumer Decision Making Process: Critical Literature Review. *Journal of International Business Research and Marketing*, 2(6), 7-14. DOI: 10.18775/jibrm.1849-8558.2015.26.3001
- Strang, E. (2015). Scents and Sensibility at Lush Cosmetics. Available at: <https://theregister.co.nz/2015/03/26/scents-and-sensibility-lush-cosmetics/>
- Turley, L. W. & Milliman, R. E. (2000). Atmospheric Effects on Shopping Behavior: A Review of the Experimental Evidence. *Journal of Business Research*, 49, 193–211. DOI: [https://doi.org/10.1016/S0148-2963\(99\)00010-7](https://doi.org/10.1016/S0148-2963(99)00010-7)
- Yarrow K. (2013). Is Retail Therapy for Real? 5 Ways Shopping Is Actually Good for You. Available at: <https://business.time.com/2013/04/16/is-retail-therapy-for-real-5-ways-shopping-is-actually-good-for-you/>