



HOTEL ATMOSPHERICS AND GUESTS' EXPERIENCE IN THE NIGERIAN HOSPITALITY INDUSTRY

Edim Eka James¹ and Inyang Bassey Inyang²

¹Department of Marketing, University of Calabar, Nigeria

Email: jamesedim@gmail.com (Corresponding author)

²Department of Marketing, University of Calabar, Nigeria

Cite this article:

Edim E.J., Inyang B.I. (2023), Hotel Atmospherics and Guests' Experience in the Nigerian Hospitality Industry. Research Journal of Hospitality and Tourism Management 2(1), 1-17. DOI: 10.52589/RJHTM-W5DTNEUV

Manuscript History

Received: 25 Feb 2022

Accepted: 2 April 2023

Published: 24 April 2023

Copyright © 2022 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *In this study, we explored how hotel atmospherics could be applied to enhance guests' experience in the Nigerian hospitality industry. The study specifically aimed to determine the effects of ambience, interior-exterior design and social environment on guests' experience in Nigerian hotels. We adopted cross-sectional survey research design. Using a structured questionnaire survey, primary data were obtained from 369 hotel guests. The data obtained were descriptively analyzed and interpreted. The hypotheses of the study were then tested using multiple linear regression. The findings thereof revealed that ambience, interior-exterior design and social environment had significant positive effects on guests' experience in the Nigerian hospitality industry. Hence, we recommended that hospitality firms' manager must intentionally and strategically manage atmospheric dimensions on a consistent basis to reinforce their capacity to project positive images and cues capable of stimulating desired responses from customers. Other practical suggestions are also presented along with theoretical suggestions for future research.*

KEYWORDS: Store Atmospherics, Service Environment, Customer Experience, Ambience, Interior-Exterior Design



INTRODUCTION

In the hospitality industry, an indispensable component of the core service delivered by hotels is the experience, which is the totality of their interactions and perceptions of the service consumed by customers. According to Hwang and Seo (2016), the guest experience is the overall assessment of customers' interactions and observations of the services obtained at a hospitality establishment, which is part of the unique service proposition. Given that the services that customers receive at a hospitality firm cannot be owned, stored, and re-used, customers only have to experience the quality of hospitality services provided. As such, Line (2021) observed that hospitality firms are applying several service management strategies in the hopes of ensuring that customers' experiences remain consistently positive throughout their interactions with hospitality services. From existing studies, it has been observed that service atmospherics is one of the key service marketing strategies applied by hospitality firms. In the views of Akhmad *et al.* (2018), hotel atmospherics comprise tangible and perceptible interior and external elements (such as ambient conditions, décor, artefacts, and people) deliberately placed in service environments to evoke certain feelings, actions, reactions, and responses from customers. They are visible and perceptible elements utilised by service providers to influence the moods, feelings, and overall behaviour of customers towards their service brands. Although service atmospherics were predominantly utilized by retail organizations to influence shoppers' in-store feelings and moods, this creative strategy is also increasingly being applied by hospitality firms to evoke certain emotions and reactions from customers (Line & Hanks, 2019). The focus of this study is, however, centred on the most prominent service atmospheric elements used by hotel establishments, namely ambience, interior-exterior décor and social factors (Kamau, 2017; Akhmad *et al.*, 2018; Lap-Kwong, 2017).

Hotel ambience constitutes experiential elements like lighting, sight, sound, scent, and temperature, which are contained within a hotel establishment (Lap-Kwong, 2017). They are designed to evoke certain feelings and reactions (such as relaxation, entertainment, excitement, and comfort) from guests who visit hotels. Interior-exterior décor encompasses the totality of decorations and designs appearing on the interior and exterior spaces of hotels (Kamau, 2017). They are placed in hotel spaces to beautify and amplify the attractiveness of the interior and exterior frontiers. Whereas, social environment entails the appearance and behaviour of service personnel stationed at hotels to provide hospitality services to customers (Ahmad *et al.*, 2019). This is an important dimension of hotel atmospherics, because the human element is essential to the successful delivery of hospitality services to guests in most societies, especially developing countries like Nigeria. As such, Nigerian hotels, especially luxury hotels in urban cities, are deploying these service atmospheric elements to compete with regular hotels and gain larger market shares. This entails that the increased usage of service atmospheric elements by Nigerian hotels are driven by intense competition among hotels as they strive to increase their customer base and improve their competitive advantages. Atmospherics are also applied as part of a service-branding strategy, to create distinctive images, experiences, feelings and emotions in the minds of customers that rival hotels find impossible or difficult to imitate. As a consequence, hotels are investing substantial resources in creating, designing and maintaining atmospheric conditions to differentiate their brands from competing brands and to project positive brand images.

However, due to the acute scarcity of relevant extant research in the Nigerian context, there is insufficient empirical evidence to determine whether or not the application of atmospheric



elements has improved guests' experiences in Nigerian hotels. From a preliminary scoping review of several existing studies, it was observed that a substantial amount of research has been carried out on hotel atmospherics and guests' satisfaction (including experience) by scholars around the world. However, in the Nigerian context, the direction of existing research has been towards retail stores, restaurants, and attraction centres (Miyene, 2021; Ogedi & Okpara, 2017; Chima, 2023; Chukundah, 2022). There is, therefore, an acutely insufficient scholarly attempt to empirically demonstrate the causality between hotel atmospherics and guests' experience, particularly in the context of Nigerian hotels. This constitutes a fundamental knowledge gap, which implies that with respect to the Nigerian hospitality industry, much is yet to be known about the influences of ambience, interior-exterior design and social environment on guests' experience. As such, because there is insufficient empirical evidence to understand the roles of atmospherics in improving guests' experience, Nigerian hotels may lack credible empirical insights into how to design atmospherics dimensions to provide positive experiences to customers. Against this backdrop, therefore, this study was designed to explore the influence of hotel atmospherics (ambience, interior-exterior design and social environment) on guests' experience in the Nigerian hospitality industry.

LITERATURE REVIEW

Theoretical Framework

The theoretical underpinning for this study is the stimulus-organism-response (SOR) theory, propounded by Mehrabian and Russell (1974). The theory was developed to explain how people (organisms) can be stimulated by factors (stimulus) to perform certain desired behaviours (response). According to the basic assumption of this theory, the behaviour (or response) of organisms (O) can be influenced and conditioned by a stimulus (S) within the environment surrounding the individual. This implies that individuals' responses to phenomena can be determined and influenced by external cues that surround their environment. The basic assumption of the stimulus-organism-response theory is best summarized by Feng *et al.* (2020: 176), who maintained that "the stimulus organism response theory states that there is a stimulus which triggers a response based on the internal feelings or behavior of an organism (person). This internal processing of the stimulus can be conscious or unconscious, and it further triggers an emotion that leads to a response. The resulting response can be internal, like an increased heart rate, or external, like crying".

This entails that an environmental stimulus plays a critical role in triggering a response from individuals either internally or externally, which is why scholars have maintained that environmental stimuli like atmospheric conditions can influence consumers' purchase behaviour (Akpan & Eno, 2021; Jalil *et al.*, 2016; Miyene, 2021; Ogedi & Okpara, 2017). In the context of this study, the relevance of the stimulus-organism-response theory is embedded in its basic premise, which suggests that atmospheric conditions at hotels can play a critical role in stimulating positive guests' experiences towards the overall service environment of hotels. These atmospheric conditions (namely: ambience, interior-exterior design, and social environment) can constitute the stimulus (S). Customers of hotels (or guests) can be the organisms (O), while service experience can be regarded as the response (R). According to the precept of the theory, it can be deduced that if atmospheric conditions (S) at hotels are attractive, and comfortable, then the experiences (R) of hotel guests (O) will be positive. And



if guests' experiences are positive, then it is plausible for them to have a satisfied behaviour towards hotels and develop the likelihood to repeatedly patronize their services.

Hotel atmospherics

The concept of 'atmospherics' was first introduced by Kotler in 1973 where a store's atmosphere was defined as the effort to design buying environments to produce specific emotional effects in the buyer that enhance purchase probability (Bawa *et al.*, 2015). Marans and Spreckelmeyer (1982) specified that a store's environmental stimuli can affect the consumer's emotional states of pleasure and arousal, which further affects approach or avoidance behaviours in purchasing. According to Bawa *et al.* (2015), atmospherics refer to the store's physical characteristics that project an image and attract customers. It refers to a psychological feeling a customer gets when he enters the store. From a hotel-based perspective, atmospherics comprise tangible and perceptible interior and external elements (such as ambient conditions, décor, artifacts and people) deliberately placed in hotel environments to evoke certain feelings, actions, reactions and responses from customers (Akhmad *et al.*, 2018). They are visible and perceptible elements utilized by service providers to influence the moods, feelings and overall behaviour of customers towards their service brands. These elements are not only for beautification but, more importantly, to communicate certain non-verbal cues to customers in the hope of promoting brand perceptions. In a hotel setting, atmospherics comprise a whole range of tangible and intangible (or perceptible) elements, such as ambience (which typically include lighting, scent, temperature and sound); interior-exterior décor (which typically includes interior design, exterior design, facilities design and spatial layout); and the social dimension (which includes staff appearance, cleanliness, attitude and responsiveness).

Guests' experience

Guest experience is the overall assessment of customers' interactions and observations of the services obtained at a hospitality establishment, which is part of the unique service proposition (Hwang & Seo, 2016). It includes an assessment of the way and manner that guests are treated in a hospitality firm, as well as their perception of the overall service quality received during their visit or stay at the facilities. Hotel guests typically patronize hotels based on service experience – the experience of others or their previous experience. And so, experience is not just an abstract concept; in the hospitality industry, it can mean the difference between customer retention and brand switching (Ali, 2016). This is because guests' experience sums up the totality of their observations and interactions with the hotel service provider, its personnel and facilities from the customers' point of view. It is a post-patronage evaluation of customers' feelings, emotions and moods while in contact with hospitality service. Basically, Adesina and Chinonso (2015) opined that this evaluation may either be positive or negative, depending on the nature of customers' interactions with the service providers' brand. A positive guest experience entails that the experience of guests at hotel facilities meets or surpasses their expectations of the service provider. Whereas, a negative experience entails that customers' expectations of the provider were not satisfactorily met. And in the case of a positive experience, customers naturally become satisfied with the hotel brand and may develop a strong inclination to repeatedly patronise the brand over the long term. Conversely, a negative service experience is the one thing required to displease customers and stoke feelings of dissatisfaction, post-patronage dissonance, negative word of mouth and engender brand-switching behaviour, which may translate into declines in market shares (Radojevic *et al.*, 2015). This is why customer experience is becoming a popular subject in hospitality research, because it is



inextricably linked to the performance of hospitality firms, including hotels.

Ambience and guests' experience

Hotel ambience constitutes experiential elements like lighting, sight, sound, scent, and temperature, which are contained within a hotel establishment (Lap-Kwong, 2017). They are designed to evoke certain feelings and reactions (such as relaxation, entertainment, excitement, and comfort) from guests who visit hotels. According to Lockwood and Pyun (2019), hotel ambience constitutes all the experiential elements such as sights, lighting, colours, music, scent and air quality that customers interact with when they are in a hotel establishment. It comprises room temperature, room scent, colours of light bulbs and the totality of room interiors which are designed to evoke certain feelings and moods in the minds of customers. The ambience is sacrosanct in the projection of a positive image in customers' minds and also to increase their expectations and ratings of the service provider. In fact, in a competitive environment, customers are more likely to patronize a hotel with good ambience over time than one with poor ambient conditions, which is why hotels are prioritizing ambience design as part of service marketing (Lockwood & Pyun, 2020). This is also because the ambience is a fundamental atmospheric element with the ability to improve or degrade customers' moods, feelings and their overall service experience. The foregoing viewpoint suggests that ambient conditions are important environmental cues that have the potential to influence customers' moods and experiences in hospitality firms. The viewpoint aligns with the study of Akhmad *et al.* (2018), which revealed that ambient conditions had significant positive impacts on customer satisfaction in Indonesian shopping malls. The viewpoint is also backed by the study of Lap-Kwong (2017), which revealed that ambient conditions had a positive effect on customer satisfaction in Chinese hotels. To confirm whether or not ambience could significantly influence guests' experience in the context of this study, the following null hypothesis was tested:

H₀₁: Ambience has no significant effect on guests' experience in the Nigerian hospitality industry

Interior-exterior design and guests' experience

Interior-exterior décor encompasses the totality of decorations and designs appearing on the interior and exterior spaces of hotels (Kamau, 2017). They are placed in hotel spaces to beautify and amplify the attractiveness of the interior and exterior frontiers. Due to its growing importance and perceived ability to attract customers, hotels are hiring professional decorators to create suitable interior-exterior decors for their facilities in order to distinctively portray a positive image to customers. Beyond beautification, interior-exterior decors (like signs, symbols, and artefacts) can be used to communicate important non-verbal cues to customers, including providing information that directs them to facilities within hotels (Choi & Kandampully, 2019). Interior signages can also inform customers of acceptable behaviours within a service facility; for instance, symbols or signs disapproving of smoking can send a message to customers that smoking is not allowed in the hotel. As such, it provides customers with information essential to effective service consumption as well as beautifying the service environment to improve the experience of customers. The foregoing viewpoint implies that interior-exterior design is useful in improving guests' experience at a hospitality firm. This viewpoint is supported by the study of Ahmad *et al.* (2019), which revealed that interior-exterior design (spatial layout/functionality, spatial signs, symbols and artefacts) had a



significant positive impact on customer satisfaction in Malaysian restaurants. The viewpoint is also reinforced by the study of Kamau (2017), which revealed that interior-exterior design (spatial layout/functionality, signs, symbols and artefacts) had a significant positive influence on customer satisfaction in restaurants within classified hotels in Kenya. To confirm whether or not interior-exterior design could significantly influence guests' experience in the context of this study, the following null hypothesis was tested:

Ho₂: Interior-exterior design has no significant effect on guests' experience in the Nigerian hospitality industry

Social environment and guests' experience

It is inconceivable to separate the roles of service personnel from the atmospheric conditions of a service environment. This is because hospitality services are delivered or at least supported by the effort of human beings, whose appearance and behaviours can impact the service environment and, by extension, the experience of customers (Line & Hanks, 2019). As such, the social environment is part and parcel of store atmospheric conditions. According to Ahmad *et al.* (2019), a hotel's social environment comprises the appearance and behaviour of service personnel stationed at hotels to provide hospitality services to customers. It comprises the appearance of service personnel, their attitude towards customers, and the way in which they interact with customers before, during and after service delivery. In the hospitality industry, customers pay great attention to how they are treated by hotel staff. As a matter of fact, the way hotel staff appear, and their handling of guests is part of the overall perception of service quality offered by the hotel (Line, 2021). As such, even though the physical environment is accurate and adequate, if staff behaviour towards customers is deficient or dissatisfying, the overall quality perception and service experience of customers may be adversely impacted. The foregoing viewpoint implies that the social dimension of hotel atmospherics could impact guests' quality perception and service experience in hotels. This viewpoint is backed by the study of Miyene (2021), which revealed that social factors had a significant positive relationship with customer loyalty towards restaurants in Port Harcourt. The viewpoint is also reinforced by the study of Ogedi and Okpara (2017), which revealed that social cues had a significant positive influence on customers' purchase behaviour. To confirm whether or not social environment could significantly influence guests' experience in the context of this study, the following null hypothesis was tested:

Ho₃: Social environment has no significant effect on guests' experience in the Nigerian hospitality industry

Empirical review and research model conceptualization

Akpan and Eno (2021) carried out a study to determine "the role of ambience (air quality and lighting) on customers' patronage in the hotel industry" in Nigeria. The study adopted a structured questionnaire to obtain data from 80 managerial personnel of two selected hotels in Lagos, Nigeria. The hypotheses developed for the study were then tested using simple regression analysis. Consequently, the findings revealed that ambience (air quality and lighting) had a significant positive effect on customer satisfaction in the Nigerian hotel industry. However, the limitation of this study is that it was restricted to just one element of hotel atmospherics (ambience); hence it does not provide any credible explanations of the general influence of hotel atmospherics on guests' experience in the Nigerian hospitality



industry. Miyene (2021) conducted a study to determine the relationship between “atmospheric conditions (namely: ambient factor, design factor, and social factor) and customer loyalty of restaurants in Port Harcourt”. The study used a structured questionnaire to obtain data from 150 customers of selected restaurant businesses in Port Harcourt, Nigeria. The hypotheses developed for the study were then tested using Pearson’s product-moment correlation analysis. The findings thereof revealed that social factors, design factors and ambient factors had significant positive relationships with customer loyalty towards restaurants in Port Harcourt. However, the limitation of the study is that it was solely restricted to restaurant businesses in Nigeria, with no particular emphasis on hotels’ atmospherics and guests’ experiences.

Ogedi and Okpara’s (2017) study examined the “influence of retail atmospherics (design, ambient and social cues) on consumer purchase behaviour in the Nigerian retail environment”. The study used a structured questionnaire to obtain data from 209 customers of selected retail stores in Lagos, Nigeria. The hypotheses of the study were then tested using regression analysis. Consequently, the findings of the study revealed that social cues, ambience and store design had significant positive influences on customers’ purchase behaviour. However, the limitation of the study is that it was solely restricted to retail stores in Nigeria, with no particular emphasis on hotels’ atmospherics and guests’ experiences. Another study by Chima (2023) was designed to explore the effect of “store attributes (store cleanliness, and store lighting) on customer patronage of retail outlets in Nigeria”. The study used a questionnaire to obtain data from 271 shoppers at selected retail outlets in Port Harcourt. Descriptive statistics were used for data analysis, while the hypotheses of the study were tested using Spearman Rank Order Correlation. The study, therefore, found that store cleanliness and store lighting had significant positive relationships with customer patronage of retail outlets in Nigeria. However, the limitation of this study is that it was restricted solely to retail businesses in Nigeria, with no particular emphasis on hotels’ atmospherics and guests’ experiences.

Another study by Chukundah (2022) centred on exploring the influence of “service atmospherics (store cleanliness and store lighting) and customer patronage of Port Harcourt Pleasure Park” in Nigeria. The study conducted a questionnaire survey to obtain data from 240 visitors of the Port Harcourt Pleasure Park in Rivers State. The hypotheses of the study were then subjected to statistical testing using the Spearman Rank Order Correlation method. It was therefore found that store cleanliness and store lighting had significant positive relationships with customer patronage of Port Harcourt Pleasure Park. However, the limitation of this study is that it was restricted solely to an attraction centre in Nigeria, with no particular emphasis on hotels’ atmospherics and guests’ experiences. Similarly, Jalil *et al.* (2016) examined the “impact of store atmospherics, perceived value, and customer satisfaction on behavioural intention”. The study adopted a conceptual research method by reviewing relevant scholarly articles from previous researchers. From the positions of scholarly articles reviewed, the study revealed that store atmospherics dimensions (social factor, aesthetics, spatial layout and ambience) could enhance customers’ perceived value and behavioural intentions. However, the limitation of the study is that it was a conceptual research with no particular effort to empirically demonstrate the causality between hotel atmospherics and guests’ experience in Nigerian hotels.

Furthermore, Ahmad *et al.* (2019) conducted a study to determine the impact of ambient conditions, spatial layout/functionality, spatial signs, symbols and artefacts, and social factors on customer satisfaction in Malaysian restaurants”. Using a structured questionnaire survey,



the study obtained data from 259 customers of restaurants in Malaysia. The findings of the study thereof revealed that ambient conditions, spatial layout and functionality, spatial signs, symbols and artefacts, and social factors had significant positive impacts on customer satisfaction in Malaysian restaurants. The limitation of this study, however, is that it was overwhelmingly restricted to restaurants in Malaysia, with no particular emphasis on guests' experience in the Nigerian hospitality industry. Also, Kamau (2017) centred on examining the "influence of ambient conditions, spatial layout/functionality, signs, symbols and artefacts, and facility cleanliness on customer satisfaction in restaurants within classified hotels in Kenya". The study used a structured questionnaire survey to collect data from 406 customers and managers of restaurants in Nairobi. The findings thereof revealed that ambient conditions, spatial layout/functionality, signs, symbols and artefacts, and facility cleanliness had significant positive influences on customer satisfaction in restaurants within classified hotels in Kenya. However, the limitation of the study is that it was overwhelmingly restricted to Kenyan hotels, with no particular emphasis on guests' experience in the Nigerian hospitality industry.

In addition, Akhmad *et al.* (2018) conducted a study to establish the "impacts of ambient conditions; spatial layout and functionality; signs, symbols and artefacts; and social factors on customer satisfaction in shopping malls in Indonesia". The study employed a research questionnaire to collect data from 340 customers of shopping malls in Indonesia. After data analysis, it was revealed that ambient conditions, spatial layout/functionality, signs, symbols and artefacts and social factors had significant positive impacts on customer satisfaction in Indonesian shopping malls. However, the limitation of the study is that it was overwhelmingly restricted to shopping malls in Indonesia, with no particular emphasis on guests' experience in the Nigerian hospitality industry. Similarly, Lap-Kwong's (2017) study was designed to determine the "effects of ambient conditions, spatial layout/functionality, spatial signs, symbols and artefacts, and cleanliness on customer satisfaction". By conducting a structured questionnaire survey, the study obtained data from 207 customers of Hotel Buffet Restaurant in China. Consequently, the findings of the study revealed that ambient conditions, spatial layout/functionality, spatial signs, symbols and artefacts, and cleanliness had a positive effect on customer satisfaction in Chinese hotels. However, the limitation of the study is that it was overwhelmingly restricted to Chinese hotels, with no particular emphasis on guests' experience in the Nigerian hospitality industry.

Judging by the findings of the majority of the reviewed studies, it can be seen that the general perception of most extant scholars is that service atmospheric conditions have a substantial role to play in influencing consumer purchase behaviours. As such, in the context of this study, it is hypothesized that hotel atmospheric conditions (such as ambience, interior-exterior design and social environment) have critical roles to play in improving guests' experience with hospitality services. To comprehensively explain the hypothesized relationship between the study variables, the conceptual model presented in Figure 1 was developed. According to the conceptual model, it can be seen that hotel atmospheric conditions are presumed to be correlated with guests' experiences.

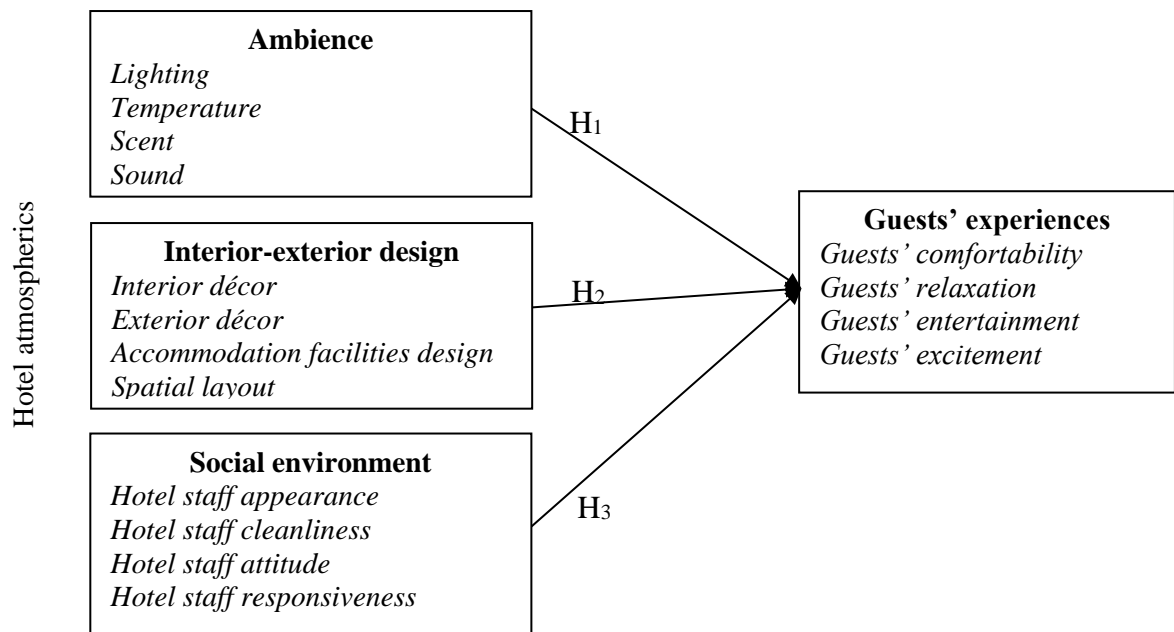


Figure 1: Conceptual model of the study

Source: Indicators of hotel atmospherics adapted from Kamau (2017); Akhmad et al. (2018); Lap-Kwong (2017). Indicators of guests' experience adapted from Xiang et al. (2015).

METHODOLOGY

For this study, we adopted the cross-sectional survey research design, which enabled us to study a representative sample of hotel guests on a one-time basis over a short period of time in order to make generalizations about the overall population. Since we could not get access to the population of all hotel guests in Nigeria, we targeted an estimated population of 10,000 hotel guests, from which a sample size of 385 guests was obtained using the Taro Yamane formula as shown below:

$$\frac{N}{1+N(e)^2}$$

Where:

- n = Sample size required
- N = Finite population (10,000)
- I = Constant
- e = Margin of error (5 percent)



By simple substitution,

$$\begin{aligned}
 n &= \frac{10,000}{1+10,000 (0.05)^2} \\
 &= \frac{10,000}{1+10,000 (0.0025)} \\
 &= \frac{10,000}{1+25} \\
 &= \frac{10,000}{26} \\
 &= 384.6
 \end{aligned}$$

∴ n = 385 hotel guests approximately

Furthermore, we adopted convenience sampling technique to target and locate hotel guests to participate in the questionnaire survey. In applying convenience sampling, we selected twenty (20) popular hotels in Calabar, Cross River State, as the unit of analysis. Accompanied by a 5-member team of enumerators, we visited the locations of these hotels and administered copies of the questionnaire to customers who were found within the premises of the hotels. This resulted in the administration of 385 questionnaire copies to the respondents. The instrument administered was a 5-point Likert scale-structured questionnaire, with measures adapted from existing studies. The statements measuring ambience (1-4) were adapted from Kamau (2017); the statements measuring interior-exterior design (5-8) were adapted from Akhmad *et al.* (2018); the statements measuring social environment (9-12) were adapted from Lap-Kwong (2017); whereas the statements measuring guests' experience (13-16) were adapted from Xiang *et al.* (2015). Prior to questionnaire administration, the instrument was content-validated by research experts, while its reliability status was confirmed through Cronbach's alpha reliability method, as shown in Table 1. As can be seen in Table 1, all measurement scales in the questionnaire generated Cronbach's alphas not less than the benchmark of 0.7 (as prescribed by Pentapati *et al.*, 2020). The data obtained from the field administration of the questionnaire were analyzed and interpreted using descriptive statistics, while the hypotheses of the study were tested using multiple linear regression. The regression model is stated thus:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \text{ ----- EQ1}$$

$$\text{GUESTEXP} = a + \beta_1 \text{AMB} + \beta_2 \text{INDESIGN} + \beta_3 \text{SOCENVIRON} + e \text{ ----- EQ2}$$

Where:

- a = The intercept (or constant)
- $\beta_1 \text{AMB}$ = Coefficient of ambience
- $\beta_2 \text{INDESIGN}$ = Coefficient of interior-exterior design
- $\beta_3 \text{SOCENVIRON}$ = Coefficient of social environment
- e = Error margin (5 percent)

Therefore:



- X₁ = Ambience
- X₂ = Interior-exterior design
- X₃ = Social environment

Table 1: Cronbach’s reliability coefficients

| Variables | No of items | Cronbach’s alpha coefficient |
|---|-------------|------------------------------|
| Ambience (AMB 1-4) | 4 | 0.764 |
| Interior-exterior design (INDESIGN 5-8) | 4 | 0.861 |
| Social environments (SOCENVIRON 9-12) | 4 | 0.761 |
| Guests’ experience (GUESTEXP 13-16) | 4 | 0.855 |
| | 16 | |

Table source: Computation by authors via SPSS (2023)

ANALYSIS AND INTERPRETATION

During the field survey, we administered a total number of 385 copies of the questionnaire to hotel guests. However, due to respondents’ errors during the completion of the questionnaire, 16 copies of the questionnaire were invalid because of multiple and incoherent responses by respondents. Hence, 369 copies (or 95.8 percent) of the questionnaire were correctly completed and usable for the analysis.

Table 2: Results of descriptive analysis of research variables

| | Items | N | Mean | SD | Remark |
|---------------------------------|---------------------------------|-----|-------|-------|----------|
| Ambience | | | | | |
| 1 | Lighting | 369 | 4.652 | 1.515 | Accepted |
| 2 | Temperature | 369 | 3.515 | 1.871 | Accepted |
| 3 | Scent | 369 | 4.651 | 1.661 | Accepted |
| 4 | Sound | 369 | 3.652 | 1.671 | Accepted |
| Interior-exterior design | | | | | |
| 5 | Interior décor | 369 | 3.982 | 1.871 | Accepted |
| 6 | Exterior décor | 369 | 3.666 | 1.832 | Accepted |
| 7 | Accommodation facilities design | 369 | 4.981 | 1.671 | Accepted |
| 8 | Spatial layout | 369 | 3.982 | 1.887 | Accepted |
| Social environment | | | | | |
| 9 | Hotel staff appearance | 369 | 4.111 | 1.986 | Accepted |
| 10 | Hotel staff cleanliness | 369 | 3.871 | 1.986 | Accepted |
| 11 | Hotel staff attitude | 369 | 3.812 | 1.629 | Accepted |



| | | | | | |
|----------------------------|----------------------------|-----|-------|-------|----------|
| 12 | Hotel staff responsiveness | 369 | 4.081 | 1.663 | Accepted |
| Guests' experiences | | | | | |
| 13 | Guests' comfortability | 369 | 3.991 | 1.872 | Accepted |
| 14 | Guests' relaxation | 369 | 4.091 | 1.801 | Accepted |
| 15 | Guests' entertainment | 369 | 3.882 | 1.888 | Accepted |
| 16 | Guests' excitement | 369 | 3.871 | 1.650 | Accepted |

Table source: Computation by authors via SPSS (2023)

Table 2 displays the results of the descriptive analysis of ambience, interior-exterior design, social environment and guests' experience. It shows that the proxies of ambience were all accepted at a maximum evaluation point of 5.00 and a minimum of 3.00. Mean values were 4.652, 3.515, 4.651 and 3.652, respectively, for lighting, temperature, scent and sound. The table also displays that the proxies of interior-exterior design were all accepted at a maximum evaluation point of 5.00 and a minimum of 3.00. Mean values were 3.982, 3.666, 4.981 and 3.982, respectively, for interior décor, exterior décor, accommodation facilities design and spatial layout. Also, the proxies of the social environment were all accepted at a maximum evaluation point of 5.00 and a minimum of 3.00. Mean values were 4.111, 3.871, 3.812 and 4.081, respectively, for hotel staff appearance, hotel staff cleanliness, hotel staff attitude and hotel staff responsiveness. Finally, the table shows that the proxies of guests' experience were all accepted at a maximum evaluation point of 5.00 and a minimum of 3.00. Mean values were 3.991, 4.091, 3.882 and 3.871, respectively, for guests' comfortability, guests' relaxation, guests' entertainment and guests' excitement.

Table 3: Model summary results of the effect of hotel atmospherics on guests' experience in the Nigerian hospitality industry

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .669 ^a | .448 | .444 | .66229 |

a. Predictors: (Constant), Ambience, interior-exterior design, social environment

Table source: Computation by authors via SPSS (2023)

Table 4: Analysis of variance (ANOVA) results of the effect of hotel atmospherics on guests' experience in the Nigerian hospitality industry

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 130.024 | 3 | 43.341 | 98.812 | .000 ^b |
| | Residual | 160.099 | 365 | .439 | | |
| | Total | 290.123 | 368 | | | |

a. Dependent Variable: Guests' experience

b. Predictors: (Constant), Ambience, interior-exterior design, social environment

Table source: Computation by authors via SPSS (2023)



Table 5: Coefficients of the effect of hotel atmospherics on guests' experience in the Nigerian hospitality industry

| Model | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|--------------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 (Constant) | 4.753 | .118 | | 40.285 | .000 | | |
| Ambience | .469 | .052 | .420 | 9.040 | .000 | .701 | 1.426 |
| Interior-exterior design | .259 | .057 | .320 | 4.520 | .000 | .301 | 3.320 |
| Social environment | .470 | .067 | .552 | 7.044 | .000 | .246 | 4.066 |

a. Dependent Variable: Guests' experience

Table source: Computation by authors via SPSS (2023)

The results on Tables 3, 4 and 5 demonstrate the effects of hotel atmospherics on guests' experience in the Nigerian hospitality industry. The correlation coefficient ($R = 0.669$) in Table 3 reveals that the relationship between hotel atmospherics and guests' experience in the Nigerian hospitality industry is 66.9 percent. This indicates a very high degree of relationship between the variables in the context of the study. The coefficient of determination ($R^2 = 0.448$) indicates that hotel atmospherics accounts for up to 44.8 percent in the variation of guests' experience in the Nigerian hospitality industry. This implies that if other factors remain unchanged, hotel atmospherics will affect guests' experience in the Nigerian hospitality industry by up to 44.8 percent. Given that $F = 98.812$ and $p = 0.000$, as shown in Table 4, it indicates that the effect of hotel atmospherics on guests' experience in the Nigerian hospitality industry is statistically significant.

Furthermore, the collinearity statistics presented in Table 5 indicate that the variables were devoid of multicollinearity because the tolerance values generated exceeded 0.1 and the Variance Inflation Factors (VIF) generated were not greater than 5. This entails that the multicollinearity condition of regression analysis has been met under this circumstance (Ringle *et al.*, 2015). Also, from the standardized coefficients column in Table 5, it has been revealed that with a beta coefficient of 0.552 or 55.2 percent, the social environment had the highest contribution to the regression model. The second-highest contributor to the model is the ambience, with a beta coefficient of 0.420 or 42.0 percent. Whereas, the least contributing variable to the model is interior-exterior design, with a beta coefficient of 0.320 or 32.0 percent. In addition, Table 5 also shows that the p-values of all the variables tested were less than the error margin of 0.05 with positive t-test values [(ambience: p-value = 0.000, $t = 9.040$); (interior-exterior design: p-value = 0.000, $t = 4.520$); and (social environment: p-value = 0.000, $t = 7.044$)]. This implies that ambience, interior-exterior design, and social environment had significant positive effects on guests' experience in the Nigerian hospitality industry.



DISCUSSION, CONCLUSION AND PRACTICAL IMPLICATIONS

This study sought to explore the influence of hotel atmospherics on guests' experience in the Nigerian hospitality industry. This was done by testing four null hypotheses through multiple regression analysis. The first finding of the study, based on the test of hypothesis one, revealed that ambience had a significant positive effect on guests' experience in the Nigerian hospitality industry. This finding aligns with the study of Akhmad *et al.* (2018), which revealed that ambient conditions had significant positive impacts on customer satisfaction in Indonesian shopping malls. The finding is also backed by the study of Lap-Kwong (2017), which revealed that ambient conditions had a positive effect on customer satisfaction in Chinese hotels. This implies that ambience has been proven to be an effective atmospherics dimension with the capacity to significantly enhance guests' experience in the Nigerian hospitality industry. The test of hypothesis two also revealed that interior-exterior design had a significant positive effect on guests' experience in the Nigerian hospitality industry. This finding is reinforced by the study of Ahmad *et al.* (2019), which revealed that interior-exterior design (spatial layout/functionality, spatial signs, symbols and artefacts) had a significant positive impact on customer satisfaction in Malaysian restaurants. The finding is also reinforced by the study of Kamau (2017), which revealed that interior-exterior design (spatial layout/functionality, signs, symbols and artefacts) had a significant positive influence on customer satisfaction in restaurants within classified hotels in Kenya. The implication of this finding in the context of this study is that we have been able to confirm that interior-exterior design is an effective atmospherics dimension with the capacity to significantly enhance guests' experience in the Nigerian hospitality industry. Finally, the test of hypothesis three revealed that social environment had a significant positive effect on guests' experience in the Nigerian hospitality industry. This finding is corroborated by the study of Miyene (2021), which revealed that social factors had a significant positive relationship with customer loyalty towards restaurants in Port Harcourt. The finding is also reinforced by the study of Ogedi and Okpara (2017), which revealed that social cues had a significant positive influence on customers' purchase behaviour. This implies that in the context of this study, the social environment has been confirmed to be an effective atmospherics dimension with the capacity to significantly enhance guests' experience in the Nigerian hospitality industry.

Guided by the insights revealed in the findings of the study, we have adequate substantive empirical evidence to conclude that hotel atmospherics is a critical service marketing strategy with the proven capacity to substantially improve guests' experiences in the Nigerian hospitality industry. However, for this to be effective, hospitality firms' managers must intentionally and strategically manage atmospheric dimensions on a consistent basis to reinforce their capacity to project positive images and cues capable of stimulating desired responses from customers. Therefore, we have presented some practical suggestions which could be applied by hotel managers to effectively manage their atmospherics dimensions. Firstly, we advise that hotels of all sizes should prioritize their ambience design by ensuring that customer service spaces (like rooms, restaurants, bars, swimming sites, and other recreational spots) in hotels are beautified with attractive lighting, comfortable temperature, pleasant scent and soothing music that can help guests relax and enjoy memorable experiences. Secondly, we advise that both the interior and exterior environments of hotels are creatively designed and arranged in such a way that guests can easily access the facilities they need while enjoying memorable hospitality experiences. Thirdly, we strongly advise that hotels should pay acute attention to service personnel and ensure that they are attractively dressed, properly



trained, supervised and motivated to treat guests with the highest levels of courtesy and responsiveness. With these policy and operational changes, hotels can ensure that core dimensions of their atmospherics are adequately designed to communicate positive cues, vibes and emotions to guests while ensuring that they are comfortable, relaxed, excited and entertained at hotel sites.

LIMITATIONS AND FUTURE RESEARCH

This study was limited to hotel guests and how atmospheric conditions influence their experiences in Nigerian hotels. As such, it does not explain the extent to which hotel atmospherics contribute to the marketing effectiveness of hotels, such as brand promotion and customer retention. We hereby suggest that future research should explore how hotel management could apply atmospherics strategy to enhance their marketing performance amidst intense competition in the hospitality industry. Research on atmospherics and guests' experience in the tourism industry of Nigeria is currently acutely scarce. Hence, we suggest that more studies should be carried out using several other atmospherics dimensions and other categories of tourism organizations such as restaurants, events, attraction centres, resorts, cinemas, among others. This will generate more empirical evidence that can demonstrably explain the causality between atmospherics dimensions in the Nigerian hospitality industry from a broader perspective.

Acknowledgments

We acknowledge and thank all the scholars whose literary works facilitated the successful completion of this work. As a show of respect for intellectual property rights, we have adequately and appropriately cited all the scholarly works used in this study. We also thank all the hotel guests who took the time to participate in the questionnaire survey, thereby providing the data used in this study.

Conflict of interest

This is to declare that all the authors of this research paper are in full agreement regarding the publication of this work. We hereby affirm that there is no conflicting issue between the authors.

REFERENCES

- Adesina, K. I., & Chinonso, I. (2015). Service delivery and customer satisfaction in the hospitality industry: A study of the Divine Fountain Hotels Limited, Lagos, Nigeria. *Journal of Hospitality Management and Tourism*, 6(1), 1-7.
- Ahmad, E., Ashraf, P. & Imran, S. (2019). Impact of service environment on customer satisfaction in restaurants in Malaysia. *Journal of International Business Studies*, 8(3), 22-31
- Akhmad, H., Calmila, M. & Iskandar, P. (2018). Servicescape and customer satisfaction in Indonesian shopping malls. *Asian Journal of Business Research*, 12(7), 21-30
- Akpan, E. E. & Eno, N. A. (2021). The role of ambience on customers' patronage in the



- hotel industry (a case study of two hotels in Victoria Island, Lagos). *Universal Academic Journal of Education, Science and Technology*, 4(3), 80-89
- Ali, S. H. (2016). Service quality and customer satisfaction in the hospitality industry: The case of selected hotels in Jimma Town, Ethiopia. *Global Journal of Management and Business Research*, 16(5), 73-86.
- Bawa, R., Sinha, A. K. & Kant, R. (2015). Effect of store atmospherics on customer buying behaviour. *Asian Journal of Home Science*, 10(2), 386-394
- Chima, A. V. (2023). Store attributes and customer patronage of retail outlets in Nigeria. *BW Academic Journal*, 3, 12-12.
- Choi, H., & Kandampully, J. (2019). The effect of the atmosphere on customer engagement in upscale hotels: An application of SOR paradigm. *International Journal of Hospitality Management*, 77, 40-50.
- Chukundah, T. T. (2022). Service atmospherics and customer patronage of Port Harcourt pleasure park. *BW Academic Journal*, 4, 14-14.
- Feng, J. O., Lucy, L. & Huang, E. (2020). Assessing the behaviour of consumers towards virtual reality tourism: An extended model of stimulus-organism-response. *International Journal of Tourism Management*, 9(2), 169-189.
- Hwang, J., & Seo, S. (2016). A critical review of research on customer experience management: Theoretical, methodological and cultural perspectives. *International Journal of Contemporary Hospitality Management*, 4(2), 45-51
- Jalil, N. A. A., Fikry, A., & Zainuddin, A. (2016). The impact of store atmospherics, perceived value, and customer satisfaction on behavioural intention. *Procedia Economics and Finance*, 37, 538-544.
- Kamau, B. N. (2017). *Influence of servicescape on customer satisfaction in restaurants within classified hotels in Nairobi County, Kenya* [An M.Sc. thesis, Kenyatta University].
- Lap-Kwong, D. (2017). The role of servicescape in Hotel Buffet Restaurant. *Journal of Hotel & Business Management*, 6(1), 2-8
- Line, N. (2021). The restaurant social servicescape: Current perspectives and future considerations. *Boston Hospitality Review*, 15, 1-11.
- Line, N. D., & Hanks, L. (2019). The social servicescape: Understanding the effects in the full-service hotel industry. *International Journal of Contemporary Hospitality Management*, 7(2), 31-54
- Lockwood, A., & Pyun, K. (2019). How do customers respond to the hotel servicescape? *International Journal of Hospitality Management*, 82, 231-241.
- Lockwood, A., & Pyun, K. (2020). Developing a scale measuring customers' servicescape perceptions in upscale hotels. *International Journal of Contemporary Hospitality Management*, 32(1), 40-59.
- Marans, R. W. & Spreckelmeyer, K. F. (1982). Measuring overall architectural quality. *Environment & Behaviour*, 14, 652-670.
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press
- Miyene, C. T. (2021). Atmospheric conditions and customer loyalty of restaurants in Port Harcourt. *International Journal of Research in Commerce and Management Studies*, 3(4), 60-81
- Ogedi, A. K., & Okpara, N. (2017). Influence of retail atmospherics as nonverbal communication on purchase behaviour in the Nigerian retail environment. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 1(5), 45-62.



- Pentapati, K. C., Yeturu, S. K., & Siddiq, H. (2020). A reliability generalization meta-analysis of Child Oral Impacts on Daily Performances (C–OIDP) questionnaire. *Journal of Oral Biology and Craniofacial Research*, *10*(4), 776-781.
- Radojevic, T., Stanisic, N., & Stanic, N. (2015). Ensuring positive feedback: Factors that influence customer satisfaction in the contemporary hospitality industry. *Tourism Management*, *51*, 13-21.
- Ringle, C. M., Wande, S. & Becker, J. M. (2014). SmartPLS 3.0.
<http://www.smartpls.com>
- Xiang, Z., Schwartz, Z., Gerdes Jr, J. H., & Uysal, M. (2015). What can big data and text analytics tell us about hotel guest experience and satisfaction? *International Journal of Hospitality Management*, *44*, 120-130.