

SUSTAINABLE SERVICESCAPE QUALITY AND PATRON SATISFACTION OF CINEMAS IN PORT HARCOURT, NIGERIA

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Abstract

This study examined the effect of sustainable servicescape quality on patron satisfaction in cinemas in Port Harcourt, Rivers State, Nigeria. Specifically, the study investigated the influence of ambient conditions, spatial layout and functionality, signage and symbols, and cleanliness on patron satisfaction. A quantitative research design employing a descriptive survey approach was adopted. Data were collected from 210 cinema patrons using a structured questionnaire measured on a 5-point Likert scale. Descriptive statistics and Pearson Product Moment Correlation were used to analyze the data at a 5% level of significance. The findings revealed significant positive relationships between all four servicescape dimensions and patron satisfaction: ambient conditions ($r = 0.481, p < 0.05$), spatial layout and functionality ($r = 0.519, p < 0.05$), signage and symbols ($r = 0.443, p < 0.05$), and cleanliness ($r = 0.574, p < 0.05$). The results further indicated that cleanliness exerts the strongest influence on patron satisfaction, explaining 33% of its variance. The study concludes that sustainable servicescape quality is a critical determinant of patron satisfaction and recommends that cinema operators in Port Harcourt prioritize environment-conscious service design to enhance customer loyalty and long-term operational viability.

Keywords: Ambient Conditions; Cleanliness; Patron Satisfaction; Servicescape Quality; Sustainable Cinema.

Introduction

The global entertainment industry has undergone a profound transformation over the past two decades, with physical cinema attendance remaining a critical revenue driver despite the proliferation of digital streaming platforms. According to Frater (2023), global box office revenues reached approximately USD 26 billion in 2022, reflecting a sustained consumer preference for the collective cinema experience that digital platforms cannot fully replicate. This enduring relevance highlights the importance of the physical and experiential environment in which films are consumed. The concept of the servicescape, as

articulated by Bitner (1992), explains how the design and management of service environments influence customer perceptions, emotional responses, and behavioural outcomes. Within the context of contemporary sustainability discourse, servicescape quality extends beyond aesthetics and comfort to include environmentally responsible practices such as energy efficiency, waste management, and hygienic maintenance, all of which contribute to long-term service value and consumer well-being (Asghar et al., 2024). However, despite the growth of the formal entertainment sector in Nigeria, empirical evidence linking servicescape quality dimensions to patron satisfaction in Nigerian cinemas remains nascent. Nigeria's film industry, Nollywood, is the second-largest film-producing industry globally by volume (UNESCO, 2022), yet studies examining the physical environments of formal cinema exhibition within the Nigerian context are conspicuously limited in the academic literature. This gap is particularly significant given that the Nigerian entertainment sector, including cinema operations, is projected to reach USD 14.8 billion by 2025 (PwC, 2021). As urban populations expand and consumer expectations evolve, there is increasing demand for service environments that are not only enjoyable but also safe, inclusive, and environmentally sustainable.

In Port Harcourt, Rivers State, the cinema industry is anchored by a small number of multiplex operators serving a growing urban population. While the sector continues to expand commercially, concerns about service environment quality persist. Industry reports suggest that issues such as poor ventilation, inadequate seating arrangements, ineffective signage, and suboptimal hygiene standards can negatively influence patron experiences and reduce repeat visitation (Okafor & Eze, 2021). These challenges are not only operational but also sustainability-related, as they reflect inefficiencies in resource use, maintenance practices, and environmental management. In a competitive landscape where pricing and film content are increasingly standardised, the quality and sustainability of the servicescape become critical differentiators that shape customer loyalty and long-term viability (Asghar et al., 2024).

Sustainable servicescape quality, as adopted in this study, refers to the extent to which a cinema's physical service environment incorporates environmentally responsible design, resource-efficient operations, hygienic maintenance, and inclusive spatial arrangements that collectively enhance patron well-being and long-term service value. This conceptualisation integrates the core tenets of Bitner's (1992) servicescape framework with emerging sustainability considerations in service environments. Patron satisfaction, in this context, refers to the cognitive and affective evaluation by cinema-goers of the degree to which the physical service environment meets or exceeds their expectations.

The significance of understanding servicescape quality is both theoretical and practical. From a theoretical perspective, existing literature has extensively explored the influence of physical environments on consumer behaviour across sectors such as hospitality, retail, and healthcare (Borovska & Olgac, 2024; Nath et al., 2023), yet cinema-specific studies in sub-Saharan Africa remain limited. Moreover, much of the existing research is based on

Western or Asian contexts (Ali et al., 2020; Nusairat, 2015), where infrastructural conditions and sustainability practices differ markedly from those in Nigerian cities. This creates a contextual gap in understanding how multiple dimensions of servicescape quality interact to influence patron satisfaction in emerging markets.

Against this backdrop, this study examines the effect of sustainable servicescape quality on patron satisfaction in cinemas in Port Harcourt by integrating key dimensions of ambient conditions, spatial layout and functionality, signage and symbols, and cleanliness within a unified analytical framework. Grounded in Bitner's (1992) Servicescape Theory, the study provides empirical insight into how these elements collectively shape consumer experiences within a developing urban entertainment setting. By doing so, it contributes to a more nuanced understanding of how sustainable service environment practices can enhance customer satisfaction, support repeat patronage, and promote the long-term resilience of cinema operations in Nigeria. Specifically, the study seeks to:

- i. Determine the relationship between ambient conditions and patron satisfaction of cinemas in Port Harcourt.
- ii. Examine the relationship between spatial layout and functionality and patron satisfaction of cinemas in Port Harcourt.
- iii. Ascertain the relationship between signage and symbols and patron satisfaction of cinemas in Port Harcourt.
- iv. Establish the relationship between cleanliness and patron satisfaction of cinemas in Port Harcourt.

In line with these objectives, the study is guided by the following null hypotheses:

H₀₁: There is no significant relationship between ambient conditions and patron satisfaction of cinemas in Port Harcourt.

H₀₂: There is no significant relationship between spatial layout and functionality and patron satisfaction of cinemas in Port Harcourt.

H₀₃: There is no significant relationship between signage and symbols and patron satisfaction of cinemas in Port Harcourt.

H₀₄: There is no significant relationship between cleanliness and patron satisfaction of cinemas in Port Harcourt.

2. Literature Review

Concept of Servicescape

The servicescape refers to the physical environment in which a service is delivered and in which the provider and customer interact (Bitner, 1992). It encompasses all tangible and environmental elements that patrons experience during service consumption, including layout, ambient conditions, signage, and cleanliness. Bitner's (1992) seminal model classified servicescape elements into three broad dimensions: ambient conditions, space and function, and signs, symbols, and artifacts. These dimensions were posited to influence

both employee and customer internal responses, including cognitive, emotional, and physiological reactions, which in turn shape approach or avoidance behaviours.

Subsequent scholarship has expanded and refined this framework. Ezeh and Harris (2007) conducted a comprehensive review of servicescape research and identified a persistent call for context-specific investigations, noting that servicescape perceptions vary significantly across industries, cultures, and customer segments. Their review reinforced the view that servicescape is a multi-dimensional construct requiring nuanced measurement. More recently, Nath et al. (2023) extended the servicescape conceptualisation to account for patron perceptions of crowding and health-related risks, demonstrating the dynamic nature of servicescape research in response to evolving consumer concerns. These contributions confirm that the servicescape remains a theoretically rich and practically relevant construct in service marketing scholarship.

Within the cinema context, servicescape elements take on particular importance because the quality of the physical environment directly mediates the audience's immersion in the film experience. Unlike retail environments where the product can be evaluated independently, the cinema product and its physical delivery environment are inseparable. Thus, poorly maintained ambient conditions, inefficient spatial layouts, confusing signage, or inadequate cleanliness can undermine even the most appealing film content. The servicescape, therefore, functions as both a value-creating and a value-destroying mechanism depending on how effectively it is designed and managed.

Sustainable Servicescape Quality

The intersection of sustainability and servicescape quality has gained increasing scholarly attention in recent years. Asghar et al. (2024) introduced the concept of green servicescape, defined as the integration of environmentally responsible design principles and sustainable management practices into the physical service environment. Their study demonstrated that green servicescape perceptions significantly influence consumer attitudes, purchase intentions, and satisfaction outcomes in hospitality contexts. Similarly, Borovska and Olgac (2024) found that physical environment quality, including cleanliness, ambient comfort, and spatial efficiency, significantly predicted repeat purchase behaviour in fast food restaurant settings, underscoring the commercial relevance of sustainable servicescape management.

In the context of emerging markets, sustainable servicescape quality assumes additional significance. Infrastructure deficits, inconsistent maintenance standards, and limited regulatory enforcement create environments in which the physical service setting may fall short of consumer expectations. For Nigerian cinemas, the challenge of delivering consistently high servicescape quality is compounded by energy supply constraints, climate conditions that affect ambient comfort, and variable institutional capacity for maintenance. As a result, patrons in Port Harcourt are particularly sensitive to servicescape cues that signal organisational competence, care, and sustainability commitment. Cinema

operators that invest in energy-efficient cooling systems, accessible layouts, clear directional signage, and rigorous hygiene protocols communicate institutional reliability and patron respect, both of which are linked to satisfaction and loyalty.

Concept of Patron Satisfaction

Patron satisfaction refers to the evaluative judgment made by a service consumer regarding the degree to which the service experience meets or exceeds their prior expectations (Oliver, 1997). Within service marketing, satisfaction is widely regarded as both an outcome variable and an antecedent to loyalty, repeat patronage, and positive word-of-mouth referral. The Expectation-Disconfirmation Theory proposed by Oliver (1980) remains foundational in this regard, positing that satisfaction results when perceived service performance either meets or positively disconfirms consumer expectations.

In experiential service contexts such as cinemas, patron satisfaction is shaped not only by the core product, which is the film, but also by peripheral elements including queue management, staff responsiveness, food and beverage quality, and particularly the physical service environment. Research in hospitality and leisure confirms that environmental cues play a decisive role in shaping overall satisfaction assessments (Nath et al., 2023). Patrons evaluate the servicescape holistically, and negative perceptions of any single environmental dimension can diminish aggregate satisfaction, even where the core service is satisfactory. This holistic evaluation dynamic underscores the need to examine all key servicescape dimensions simultaneously when assessing their influence on patron satisfaction.

Ambient Conditions and Patron Satisfaction

Ambient conditions refer to the background characteristics of the service environment that affect the sensory experience of patrons, including temperature, air quality, lighting, music, and scent (Bitner, 1992). These non-visual elements operate primarily at a subconscious level but exert measurable influence on emotional arousal, comfort perceptions, and behavioural responses. In cinema environments, effective ambient management is particularly critical because patrons spend extended periods in a darkened, enclosed space. Uncomfortable temperatures, poor ventilation, or disruptive noise can significantly impair the immersive quality of the film experience and generate negative affect.

Empirical studies consistently support a positive relationship between ambient conditions and consumer satisfaction. Nusairat (2015) found that atmospheric elements, including lighting and temperature, significantly influenced customer emotions and downstream satisfaction in retail environments. Similarly, Asghar et al. (2024) demonstrated that green ambient cues, such as energy-efficient lighting and naturally ventilated spaces, enhanced customer perceptions of service quality and sustainability, leading to higher satisfaction scores. In the Nigerian context, where reliable electricity and climate control represent operational challenges, ambient conditions are a particularly salient dimension of sustainable servicescape quality for cinema patrons.

Spatial Layout and Functionality and Patron Satisfaction

Spatial layout and functionality refer to the arrangement of physical elements within the service environment, including the positioning of equipment, furniture, and circulation pathways, in ways that facilitate efficient and comfortable service use (Bitner, 1992). In cinema settings, this dimension encompasses seat configuration and legroom, aisle widths, screen visibility from all seating positions, access to refreshment areas, restroom location, and overall crowd flow management. An effectively designed spatial layout enhances patron comfort, reduces friction in the service journey, and signals organisational attention to the needs of diverse customer groups, including persons with disabilities.

Research has linked spatial layout quality to significant improvements in consumer satisfaction and repeat patronage behaviour. Borovska and Olgac (2024) confirmed that functional space design was among the strongest predictors of return visits in service environments, as patrons who experience ease of navigation and physical comfort form more favourable overall service evaluations. In emerging market cinema contexts, spatial deficiencies such as cramped seating, obstructed sightlines, or inaccessible amenities can create dissatisfaction that outweighs the appeal of film content, highlighting the strategic importance of investing in well-considered spatial design.

Signage and Symbols and Patron Satisfaction

Signage and symbols constitute the communicative dimension of the servicescape. They encompass all explicit and implicit environmental communicators, including directional signs, safety instructions, branding elements, pricing displays, and cultural or aesthetic symbols that shape patron perceptions of identity, safety, and orientation (Bitner, 1992; Ezeh & Harris, 2007). Effective signage reduces patron confusion, shortens decision time, enhances feelings of environmental control, and contributes to a sense of welcome and inclusion. Conversely, absent, misleading, or visually inconsistent signage generates cognitive load and negative service evaluations.

In multi-screen multiplex environments, where several films are screened simultaneously in separate auditoriums, clear and well-positioned signage is operationally indispensable. Patrons who struggle to locate their designated screen, understand pricing structures, or identify emergency exits are likely to experience heightened anxiety and reduced satisfaction. Nusairat (2015) noted that environmental symbols and spatial communication significantly mediated the relationship between physical environment quality and customer emotional responses in service settings. For Nigerian cinemas, which may serve patrons with varying levels of prior cinema experience, effective and culturally appropriate signage is both a service quality imperative and a sustainability marker that communicates responsible environmental management.

Cleanliness and Patron Satisfaction

Cleanliness represents one of the most proximal and impactful dimensions of servicescape quality on consumer satisfaction. As a tangible and immediately perceptible indicator of maintenance standards, cleanliness functions as a powerful quality signal. In food and beverage, healthcare, and entertainment service contexts, perceptions of poor cleanliness are closely associated with health risk perceptions, disgust responses, and strong avoidance intentions (Asghar et al., 2024). Within cinemas, cleanliness encompasses the condition of seats, floors, restrooms, refreshment areas, and shared surfaces such as handrails and door handles.

The link between cleanliness and patron satisfaction is well established in service research. Nath et al. (2023) found that perceived hygiene quality was among the most significant predictors of satisfaction in tourism and hospitality settings, particularly in the post-pandemic consumer landscape where health consciousness has intensified. Borovska and Olgac (2024) similarly confirmed that cleanliness perceptions significantly predicted customer repeat visits in physical service environments. In Port Harcourt's cinema context, where tropical climatic conditions can accelerate environmental deterioration, maintaining rigorous cleanliness standards represents both an operational necessity and a strategic sustainability investment that directly shapes patron satisfaction and loyalty.

Conceptual Framework

The conceptual framework of this study is grounded in Bitner's (1992) Servicescape Theory, which posits that the physical environment of a service setting directly influences internal customer responses and downstream behavioural outcomes. The framework adopted in this study conceptualises sustainable servicescape quality as a multi-dimensional construct comprising ambient conditions, spatial layout and functionality, signage and symbols, and cleanliness. Each dimension is proposed to independently predict patron satisfaction, which is operationalised as patrons' overall cognitive and affective evaluation of their cinema experience. This framework reflects both the theoretical architecture of prior servicescape research and the practical imperatives of sustainable service management in an emerging market context.

3. Methodology

This study adopted a quantitative research design using a descriptive survey approach to examine the relationship between sustainable servicescape quality dimensions and patron satisfaction in cinemas in Port Harcourt, Rivers State. The descriptive survey design was considered appropriate because it enabled the collection of quantifiable data from cinema patrons and facilitated statistical analysis of relationships between the independent and dependent variables.

The population of the study comprised cinema patrons attending the major multiplex cinema operators in Port Harcourt, including Genesis Cinemas and Filmhouse Cinemas,

both located within prominent commercial malls in the city. These outlets collectively represent the dominant formal cinema exhibition outlets in the metropolis. The population was considered infinite given the continuous and varied nature of cinema attendance across different screening times. A sample size of 210 patrons was drawn using random sampling, a purposive non-probability technique appropriate for studies targeting individuals who are actively present in a specific service environment at the time of data collection. Questionnaires were administered to patrons immediately following their cinema experience to ensure response accuracy and situational relevance.

Data were collected using a structured questionnaire divided into five sections. Section A captured demographic characteristics of respondents. Section B measured ambient conditions, Section C measured spatial layout and functionality, Section D assessed signage and symbols, Section E assessed cleanliness, and Section F measured patron satisfaction. The instrument was adapted from established scales in servicescape and service quality literature (Asghar et al., 2024; Bitner, 1992; Nath et al., 2023) and modified to suit the cinema service context in Port Harcourt. Responses were measured using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

To ensure validity, the questionnaire was subjected to face and content validation by experts in marketing and service management. Reliability was assessed using Cronbach's alpha coefficient, with all constructs exceeding the acceptable threshold of 0.70: ambient conditions (alpha = 0.84), spatial layout and functionality (alpha = 0.81), signage and symbols (alpha = 0.79), cleanliness (alpha = 0.87), and patron satisfaction (alpha = 0.89), indicating satisfactory internal consistency.

Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 26. Descriptive statistics, including means, standard deviations, and frequency distributions, were used to summarise respondent characteristics and variable patterns. Pearson Product Moment Correlation was employed to test the hypothesised relationships between each servicescape dimension and patron satisfaction. All hypotheses were tested at a 5% level of significance ($p < 0.05$). Ethical standards were strictly observed, including informed consent, confidentiality, and voluntary participation throughout the study.

4. Results

Demographic Profile of Respondents

A total of 210 questionnaires were distributed to cinema patrons across the sampled multiplexes, of which 204 were returned and deemed usable, representing a response rate of 97.1%. Of the respondents, 56.4% were male and 43.6% were female, reflecting the relatively balanced gender distribution observed in urban cinema attendance in Nigeria. In terms of age, 43.1% of respondents were between 18 and 27 years, 35.8% fell within the 28 to 37 age bracket, 14.2% were between 38 and 47 years, and 6.9% were aged 48 years and above. These figures indicate that the cinema audience in Port Harcourt is predominantly young adult, consistent with patterns observed in Nigerian urban entertainment

consumption. Regarding educational attainment, 58.3% of respondents held a bachelor's degree or its equivalent, 24.5% possessed Higher National Diplomas or professional certificates, and 17.2% had postgraduate qualifications. In terms of visit frequency, 38.7% of respondents visited the cinema at least once a month, 44.1% attended once every two to three months, and 17.2% visited less frequently. This profile suggests a moderately engaged patron base with sufficient experiential knowledge to evaluate servicescape quality dimensions reliably.

Descriptive Statistics of Study Variables

Descriptive statistics were employed to assess respondents' perceptions of each servicescape quality dimension and patron satisfaction. All items were measured on a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Ambient conditions recorded a mean score of 3.71 (SD = 0.82), indicating moderate to positive perceptions of temperature regulation, lighting quality, and air quality within cinema environments. Spatial layout and functionality yielded a mean of 3.84 (SD = 0.78), reflecting generally favourable assessments of seating comfort, aisle navigation, and screen visibility. Signage and symbols recorded a mean of 3.58 (SD = 0.91), the lowest among the servicescape dimensions, suggesting that directional communication and visual branding within Port Harcourt cinemas require improvement. Cleanliness recorded the highest mean among the independent variables at 3.96 (SD = 0.74), indicating that patrons perceived hygiene standards as comparatively satisfactory. Patron satisfaction recorded a mean of 3.81 (SD = 0.80), reflecting generally positive overall evaluations of the cinema experience among respondents.

Inferential Statistics: Hypotheses Testing

To test the hypothesised relationships between sustainable servicescape quality dimensions and patron satisfaction, Pearson Product Moment Correlation analysis was conducted. The results are presented in Table 1.

Table 1: Summary of Correlation Analysis (N = 204)

Hypothesis	Predictor Variable	Criterion Variable	r	r ²	p-value	Decision
H ₀₁	Ambient Conditions	Patron Satisfaction	0.481	0.231	0.000**	Rejected
H ₀₂	Spatial Layout and Functionality	Patron Satisfaction	0.519	0.269	0.000**	Rejected
H ₀₃	Signage and Symbols	Patron Satisfaction	0.443	0.196	0.000**	Rejected
H ₀₄	Cleanliness	Patron Satisfaction	0.574	0.330	0.000**	Rejected

Significance level: ** p < 0.05

The results indicate a significant positive relationship between ambient conditions and patron satisfaction ($r = 0.481$, $p < 0.05$). The coefficient of determination ($r^2 = 0.231$) implies that approximately 23.1% of the variance in patron satisfaction is explained by ambient conditions. This finding suggests that temperature regulation, lighting quality, and air circulation within cinema halls are meaningful contributors to the overall patron experience in Port Harcourt.

Spatial layout and functionality demonstrated a moderate positive relationship with patron satisfaction ($r = 0.519$, $p < 0.05$), with an r^2 value of 0.269 indicating that 26.9% of the variance in satisfaction is attributable to this dimension. This result affirms that seating comfort, navigational efficiency, and accessible design are important determinants of how patrons evaluate their cinema visit overall.

Signage and symbols showed a positive but comparatively modest correlation with patron satisfaction ($r = 0.443$, $p < 0.05$), explaining 19.6% of the variance ($r^2 = 0.196$). While statistically significant, the relatively lower correlation coefficient is consistent with the lower mean satisfaction score recorded for this dimension, suggesting that signage management remains an underdeveloped aspect of cinema servicescape quality in Port Harcourt.

Cleanliness demonstrated the strongest positive relationship with patron satisfaction among all dimensions examined ($r = 0.574$, $p < 0.05$), with an r^2 value of 0.330 indicating that cleanliness explains 33.0% of the variance in patron satisfaction. This finding underscores the primacy of hygiene as a servicescape quality driver in enclosed entertainment environments, consistent with prior literature in hospitality and leisure contexts.

Since all p -values are less than 0.05, the null hypotheses H_{01} , H_{02} , H_{03} , and H_{04} are rejected. These findings confirm that all four dimensions of sustainable servicescape quality are significantly and positively associated with patron satisfaction in cinemas in Port Harcourt.

5. Summary of Findings

The findings of this study reveal that all four dimensions of sustainable servicescape quality, namely ambient conditions, spatial layout and functionality, signage and symbols, and cleanliness, have statistically significant and positive relationships with patron satisfaction among cinema-goers in Port Harcourt. Cleanliness emerged as the strongest predictor, followed by spatial layout and functionality, ambient conditions, and signage and symbols respectively. These results indicate that patrons who perceive the physical service environment of cinemas as well-maintained, comfortably arranged, clearly communicated, and hygienically managed are more likely to report higher levels of overall satisfaction with their cinema experience.

The finding that cleanliness exerts the strongest influence on patron satisfaction aligns with the observations of Asghar et al. (2024) and Nath et al. (2023), who documented the

heightened sensitivity of service consumers to hygiene cues in enclosed environments. Similarly, the significant positive relationship between spatial layout and patron satisfaction echoes the conclusions of Borovska and Olgac (2024), who found that functional space design was a key predictor of repeat patronage in service environments. The positive influence of ambient conditions on satisfaction is consistent with the findings of Nusairat (2015), who demonstrated that atmospheric environmental elements significantly shape consumer emotional responses and satisfaction evaluations. The significant but comparatively weaker relationship between signage and patron satisfaction suggests that while communicative environmental cues matter, patrons in Port Harcourt prioritise sensory and physical comfort dimensions above informational clarity in forming satisfaction judgments.

Taken together, these findings provide contextual validation of Bitner's (1992) Servicescape Theory within the Nigerian cinema sector and extend existing knowledge by demonstrating that a sustainability-oriented conceptualisation of servicescape quality retains explanatory power in developing urban entertainment markets.

6. Implications of the Study

The findings of this study carry important theoretical, managerial, and policy implications. Theoretically, the study contributes to servicescape and service marketing scholarship by providing empirical validation of Bitner's (1992) framework within the Nigerian cinema sector, a context that has received limited academic attention despite its commercial significance. The integration of sustainability considerations into the servicescape conceptualisation, following Asghar et al. (2024), also advances the emerging literature on green servicescape by demonstrating its applicability in an African urban entertainment context.

From a managerial perspective, the findings highlight cleanliness and spatial layout as strategic priorities for cinema operators seeking to enhance patron satisfaction and encourage repeat visitation. Cinema managers in Port Harcourt should institutionalise rigorous cleaning schedules, invest in ergonomic seating upgrades, ensure adequate ventilation and climate control, and develop clear and culturally appropriate signage systems. These investments need not be prohibitively expensive; incremental improvements in maintenance culture and spatial organisation can yield measurable gains in patron satisfaction and loyalty.

For policymakers and regulatory bodies, the study underscores the importance of establishing and enforcing service environment standards for the formal entertainment sector in Nigeria. Minimum quality benchmarks for cinema servicescape elements, including hygiene standards, accessibility requirements, and ambient comfort specifications, can create an enabling environment for sustainable cinema growth that benefits both operators and patrons. Development agencies and entertainment industry

associations can also leverage these findings to design targeted capacity-building programmes for cinema operators in emerging urban markets across Nigeria.

7. Conclusion

This study examined the effect of sustainable servicescape quality on patron satisfaction in cinemas in Port Harcourt, Rivers State, Nigeria, focusing on four key dimensions: ambient conditions, spatial layout and functionality, signage and symbols, and cleanliness. The findings reveal that all four dimensions are significantly and positively associated with patron satisfaction, with cleanliness demonstrating the strongest predictive relationship. These results confirm that the physical service environment of a cinema is not merely a backdrop to the film experience but a substantive determinant of how patrons evaluate and respond to the service encounter.

The study concludes that sustainable servicescape quality is a critical strategic resource for cinema operators in Port Harcourt seeking to differentiate their offerings, enhance patron loyalty, and ensure long-term operational viability. In a market where content differentiation is increasingly constrained by shared distribution networks, the quality and sustainability of the physical environment become decisive competitive variables. Cinema operators that prioritise environmental responsibility, spatial comfort, hygiene excellence, and effective communication through their physical service environments are better positioned to achieve superior patron satisfaction outcomes and sustained patronage in an increasingly discerning urban consumer market.

8. Recommendations

Based on the findings of this study, the following recommendations are offered:

1. Cinema operators in Port Harcourt should prioritise cleanliness as a non-negotiable service standard by implementing structured daily and post-screening cleaning protocols for auditoriums, restrooms, refreshment areas, and all shared patron contact surfaces.
2. Operators should invest in ergonomic seating, adequate aisle spacing, and accessible facilities to enhance spatial layout and functionality, ensuring that patrons of all physical abilities experience comfort and navigational ease throughout the cinema environment.
3. Investment in reliable air conditioning, energy-efficient lighting, and noise reduction measures is recommended to improve ambient conditions and enhance patron immersion and physical comfort during screenings.
4. Cinema managers should develop and maintain clear, visually consistent, and multilingual signage systems throughout their facilities to reduce patron confusion, improve orientation, and communicate safety and emergency information effectively.

5. Policymakers and entertainment sector regulators should develop and enforce minimum servicescape quality standards for formal cinema operations in Nigeria to create a consistently high baseline of patron experience across the industry.

9. Suggestions for Future Studies

Future studies should expand the conceptual model by incorporating additional servicescape dimensions such as technology integration, aesthetic design, and social density to provide a more comprehensive understanding of how cinema environments shape patron satisfaction in Nigeria. Longitudinal research designs would enable investigation of how servicescape quality perceptions evolve with repeated patronage and how changes in physical environment standards translate into shifts in satisfaction and loyalty over time. Comparative studies across different cities in Nigeria, or across multiple sub-Saharan African markets, would enhance the generalisability of findings and illuminate the extent to which contextual factors moderate the servicescape-satisfaction relationship. Additionally, mediating and moderating variable analyses, for instance examining the role of patron involvement or service recovery in the servicescape-satisfaction link, would deepen theoretical understanding and offer richer practical guidance for cinema operators.

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