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An Analysis of the Discernible Pattern of Factors Affecting the Maintenance of Architectural Heritage in South-East Nigerian.

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ABSTRACT

Architectural heritage plays a crucial role in preserving the cultural identity and historical narratives of a region. However, the maintenance and preservation of these valuable cultural assets are being challenged by various factors. This study aims to analyse the discernible pattern of factors affecting the maintenance of architectural heritage in South-East Nigeria. Using a mixed-methods approach, the research examines both quantitative data and qualitative insights to identify the key factors affecting the heritage building in the region. Through surveys, interviews with stakeholders, and an in-depth review of relevant policy documents and existing literature, the research seeks to uncover the underlying patterns and correlations between various determinants of architectural heritage maintenance. The findings will provide a comprehensive understanding of the challenges faced and the opportunities available for more effective preservation efforts. The outcome of this study is expected to inform policymakers, heritage management authorities, and community organizations in developing targeted strategies and interventions to address the pressing issues surrounding the maintenance of architectural heritage in South-East Nigeria.

Keywords: Architectural, Heritage, Policy, critical Regionalism.

Introduction

South-East Nigeria is home to a rich tapestry of architectural heritage, reflecting the diverse cultural, historical, and social narratives of the region. The architectural landscape includes traditional mud houses, colonial-era buildings, and sacred sites, each embodying unique design elements and construction techniques. Notable examples include the ancient Nok terracotta sculptures and the intricately designed palaces of Igbo kings and chiefs. These structures are not merely relics of the past but are living testaments to the ingenuity and artistry of the indigenous peoples (Uduku, 1996). The historical significance of these architectural forms lies in their ability to convey the evolution of socio-cultural practices, technological advancements, and the influences of external civilizations such as those brought by European colonizers during the colonial era (Okoye, 2002).

Preserving architectural heritage in South-East Nigeria is of paramount importance for several reasons. Culturally, these structures serve as a tangible connection to the past, allowing contemporary generations to maintain a sense of identity and continuity. Socially, they foster community pride and cohesion by acting as focal points for communal activities and cultural ceremonies (Olufemi, 2007). Furthermore, the conservation of these heritage sites has significant economic implications, particularly in the realm of tourism. Heritage tourism can generate substantial revenue and create job opportunities, contributing to the overall economic development of the region (Nwachukwu, 2014). Maintaining these architectural treasures is crucial for educational purposes, providing invaluable resources for research and learning about historical construction methods, cultural practices, and regional history (Jideonwo, 2015). Thus, the preservation of architectural heritage in South-East Nigeria is integral not only to safeguarding the region's cultural legacy but also to promoting its socio-economic well-being.

Architectural heritage plays a crucial role in fostering community identity and pride. These heritage structures are often seen as symbols of a community's historical journey and cultural achievements, reflecting unique architectural styles and traditional craftsmanship passed down through generations. They serve as tangible connections to the past, offering residents a sense of continuity and belonging. This connection helps to reinforce communal bonds and pride in local history, fostering a shared sense of identity that transcends individual experiences (Graham, Ashworth, & Tunbridge, 2000). The preservation of such heritage sites promotes cultural diversity and understanding by highlighting the distinctiveness of local traditions and practices, which can be especially important in regions with rich, multifaceted histories like South-East Nigeria (Lowenthal, 1985).

The economic benefits of architectural heritage conservation are significant, particularly through heritage tourism. Preserved heritage sites attract tourists, generating substantial revenue that can be reinvested into the community. This influx of tourists not only supports local businesses, such as hotels, restaurants, and shops, but also creates job opportunities, thereby boosting the local economy (Timothy & Boyd, 2003). Well-maintained heritage sites can increase property values and attract investment, further contributing to economic development (Garrod & Fyall, 2000). Beyond economic gains, heritage sites provide valuable educational and research opportunities. They serve as living laboratories where students, scholars, and researchers can

study historical architecture, construction techniques, and cultural practices (Feilden, 2003). These sites offer insights into past societies, enriching our understanding of history and informing contemporary architectural and urban planning practices (Jokilehto, 1999). Therefore, the conservation of architectural heritage is not only a cultural imperative but also an economic and educational asset.

The current state of architectural heritage in South-East Nigeria is a matter of growing concern. Many historic buildings in this region, which hold significant cultural and historical value, are in a state of disrepair. This deterioration is partly due to the region's tropical climate, characterized by high humidity and heavy rainfall, which accelerates the decay of traditional building materials like mud, thatch, and wood (Ezeadichie, 2012). Again, rapid urbanization and economic development have led to the destruction or alteration of heritage sites to make way for new construction, often without adequate documentation or preservation efforts (Okeke, 2017). As a result, invaluable architectural treasures that embody the region's history and cultural identity are being lost at an alarming rate.

The neglect and deterioration of these historic buildings can be attributed to several factors, including insufficient funding, lack of public awareness, and inadequate governmental support. Many heritage sites suffer from neglect due to limited financial resources allocated for their upkeep and restoration (Adedokun, 2013). Public awareness about the importance of preserving these structures is also low, leading to a general apathy towards heritage conservation. Furthermore, there is often a lack of clear policies and effective regulatory frameworks to protect and manage heritage sites (Ogundele, 2014). This situation is exacerbated by the absence of trained professionals and artisans skilled in traditional building techniques, which are crucial for proper restoration and maintenance (Graham, 2002).

Understanding the factors that impact the maintenance and conservation of architectural heritage in South-East Nigeria is essential to address these challenges effectively. A comprehensive analysis of these factors can inform the development of targeted strategies to enhance heritage conservation efforts. These strategies might include increasing public awareness and community involvement, securing funding and financial incentives for conservation projects, and implementing robust legal frameworks and policies to protect heritage sites (Jokilehto, 1999). Additionally, training programs to build local capacity in traditional construction and conservation techniques are vital. By addressing the root causes of deterioration and neglect, it is possible to preserve the architectural heritage of South-East Nigeria for future generations, ensuring that these historic buildings continue to serve as cultural and educational resources (Feilden, 2003).

Previous studies on architectural heritage maintenance have provided valuable insights into the factors that influence the preservation of historic buildings both in Nigeria and globally. Research conducted in various parts of the world has highlighted the critical role of government policies, community involvement, and adequate funding in successful heritage conservation efforts (Jokilehto, 1999; Graham, 2002). In Nigeria, studies have focused on regions like the South-West and the Northern parts, examining how socio-economic challenges, environmental factors, and urbanization pressures contribute to the deterioration of heritage sites (Adedokun, 2013; Ezeadichie, 2012). For example, Adedokun (2013) explored the potential of heritage tourism in Ile-Ife, revealing the economic benefits and challenges associated with maintaining historic sites. Similarly, Ogundele (2014) discussed the current challenges of cultural heritage management in Nigeria, emphasizing the need for better legal frameworks and increased public awareness.

Despite these valuable contributions, there remain significant gaps in the research specific to South-East Nigeria. While the general factors affecting heritage conservation are well-documented, studies that focus explicitly on the unique cultural, social, and environmental contexts of South-East Nigeria are sparse. This region, rich in traditional architecture and cultural heritage, faces distinct challenges due to its specific climatic conditions, socio-political dynamics, and urbanization patterns (Okeke, 2017). Existing literature often overlooks these nuances, resulting in a lack of targeted strategies that address the region's specific needs. Therefore, there is a pressing need for comprehensive research that not only identifies the factors impacting heritage maintenance in South-East Nigeria but also proposes practical, context-specific solutions. This study aims to fill this gap by providing a detailed analysis of the factors affecting the maintenance of architectural heritage in the region, thereby contributing to the broader discourse on heritage conservation in Nigeria and beyond.

The aim of this research is to systematically analyze the discernible pattern of factors influencing the maintenance of architectural heritage in South-East Nigeria. By identifying and understanding these factors, the study seeks to provide comprehensive insights into the challenges and opportunities for preserving historic buildings in this region. The significance of this research lies in its potential to inform and guide effective conservation strategies, ensuring the sustainability of architectural heritage that is vital to the region's cultural identity, economic development through tourism, and educational value. This study aims to bridge the existing research gaps by offering targeted recommendations for policymakers, conservationists, and local communities, thereby enhancing the preservation efforts and promoting a greater appreciation of South-East Nigeria's rich architectural legacy.

Study Area

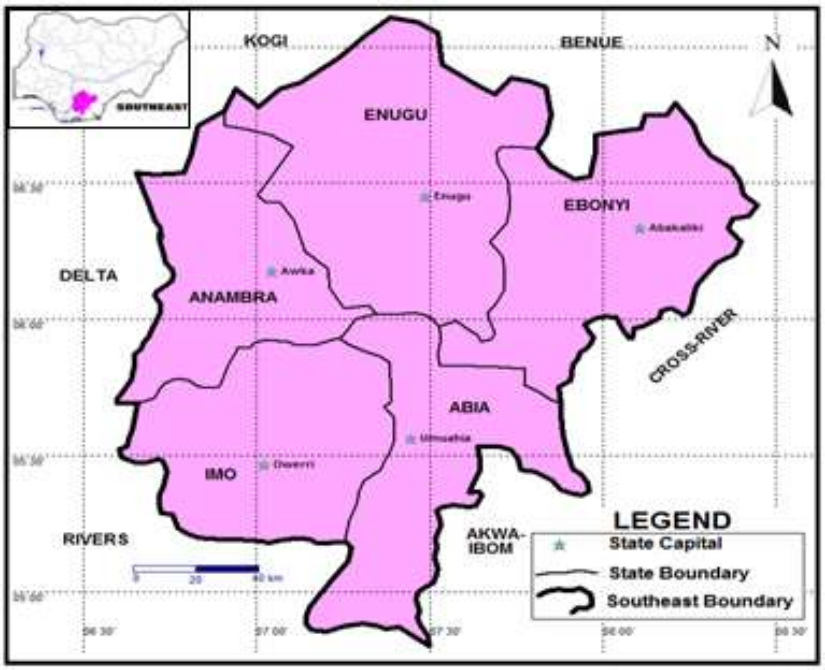

Fig. 1.0 : Map of South-East Nigeria

Source: GIS Lab., Department of Geography, University of Nigeria, Nsukka, 2016.

The study area is the South-East, which is the smallest of the six geopolitical zones of Nigeria representing both a geographic and political region of the country. It comprises five states which are: Anambra, Enugu, Ebonyi, Imo and Abia. The zone is bounded by the river Niger on the west, the riverine Niger Delta on the south, the flat North Central to the north, and the Cross River on the east. It is divided between the Cross–Niger transition forests ecoregions in the south and the Guinean forest–savanna mosaic in the drier north. Culturally, the vast majority of the zone falls within Igboland–the indigenous cultural homeland of the Igbo people, a group which makes up the largest ethnic percentage of the South-East population.

Research Methodology

A mixed-methods approach was used so as to examines both quantitative data and qualitative insights to identify the key factors affecting the maintenance of heritage buildings through surveys, interviews with stakeholders, and an in-depth review of relevant policy documents and existing literature. The population of study are the stakeholders (architects, town and urban planners, and curators) involved in decision making and policies regarding architectural heritage conservation in the state ministry of housing, works, and lands in South-East Nigeria. Using the Taro Yamane 1967 formula, the sample size was determined to be 192 stakeholders. 192 questionnaires were administered, and 186 were retrieved.

Results and Discussions

Table 1.0: Factors affecting the maintenance of architectural heritage

S/n		Strongly disagree n (%)	Disagree n (%)	Indifferent n (%)	Agree n (%)	Strongly Agree n (%)	Mean ± SD
1	Unplanned restoration and retrofitting affect architectural heritage in South-East Nigeria	1 (0.5)	0 (0.0)	2 (1.1)	39 (21.0)	144 (77.4)	4.75 ± 0.53
2	Rapid urbanization and unchecked development pose a problem to the architectural heritage in South-East Nigeria	1 (0.5)	0 (0.0)	5 (2.7)	59 (31.7)	121 (65.1)	4.61 ± 0.59

3	Architectural heritage sites in South-East Nigeria are vulnerable to the effects of climate change, such as rising temperatures and extreme weather events	2 (1.1)	6 (3.2)	28 (15.1)	105 (56.5)	45 (24.2)	3.99 ± 0.79
4	Natural disasters, such as earthquakes, floods, or hurricanes, has caused visible damage to architectural heritage sites in South-East Nigeria in recent years	6 (3.2)	110 (59.1)	54 (29.0)	6 (3.2)	10 (5.4)	2.48 ± 0.84
5	Adequate measures and resources be put in place to protect architectural heritage sites from the impacts of climate change, pollution, and natural disasters in our community	1 (0.5)	2 (1.1)	6 (3.2)	68 (36.6)	109 (58.6)	4.52 ± 0.67
6	Preservation efforts for architectural heritage sites are often influenced by the political will and commitment of government officials	1 (0.5)	2 (1.1)	5 (2.7)	83 (44.6)	95 (51.1)	4.45 ± 0.66
7	Heritage conservation projects are sometimes neglected or abandoned due to shifts in political leadership and government priorities	1 (0.5)	0 (0.0)	6 (3.2)	72 (38.7)	107 (57.5)	4.53 ± 0.62
8	Political decisions, such as budget allocations and funding priorities, have a direct impact on the preservation of architectural heritage sites	1 (0.5)	0 (0.0)	6 (3.2)	83 (44.6)	96 (51.6)	4.47 ± 0.62
9	There is a need for stronger legislation and enforcement of laws protecting architectural heritage sites	1 (0.5)	84 (45.2)	0 (0.0)	0 (0.0)	101 (54.3)	4.53 ± 0.56
10	The engagement of community members and heritage advocates in the political process is essential for the preservation of architectural heritage	1 (0.5)	0 (0.0)	3 (1.6)	81 (43.5)	101 (54.3)	4.51 ± 0.59
11	Economic benefits of heritage tourism, including increased revenue and job opportunities, make a valid case for investing in the preservation of architectural heritage	2 (1.1)	0 (0.0)	2 (1.1)	83 (44.6)	99 (53.2)	4.49 ± 0.63
12	The potential economic value of architectural heritage, including adaptive reuse for commercial purposes, should be explored to ensure sustainability	1 (0.5)	0 (0.0)	6 (3.2)	80 (43.0)	99 (53.2)	4.48 ± 0.62

13	Economic incentives and tax credits for property owners who maintain architectural heritage sites could be a viable solution to encourage preservation	1 (0.5)	1 (0.5)	3 (1.6)	92 (49.5)	89 (47.8)	4.44 ± 0.61
14	The economic benefits of architectural heritage preservation extend beyond immediate financial gains and contribute to the overall well-being of our community	1 (0.5)	1 (0.5)	3 (1.6)	77 (41.4)	104 (55.9)	4.52 ± 0.62
15	A lack of economic viability and potential returns on investment can deter property owners from preserving architectural heritage sites	1 (0.5)	1 (0.5)	7 (3.8)	69 (37.1)	108 (58.1)	4.52 ± 0.65
16	Public awareness and education about the historical and cultural value of architectural heritage sites are essential for their long-term preservation	1 (0.5)	0 (0.0)	1 (0.5)	89 (47.8)	95 (51.1)	4.49 ± 0.57
17	The lack of skilled and qualified preservationist is a problem that affects sustainability of architectural heritage	1 (0.5)	2 (1.1)	24 (12.9)	76 (40.9)	83 (44.6)	4.28 ± 0.77
18	Literacy campaigns and public awareness initiatives have been effective in promoting a deeper understanding of architectural heritage among residents	1 (0.5)	1 (0.5)	3 (1.6)	91 (48.9)	90 (48.4)	4.44 ± 0.61
19	There is need for the use of digital and online resources to improved accessibility on information about architectural heritage in our region	1 (0.5)	0 (0.0)	4 (2.2)	88 (47.3)	93 (50.0)	4.46 ± 0.59
20	Architectural heritage preservation is directly linked to the level of literacy and awareness in our community	1 (0.5)	1 (0.5)	6 (3.2)	98 (52.7)	80 (43.0)	4.37 ± 0.63
21	Cultural neglect is a problem that affects architectural heritage	1 (0.5)	0 (0.0)	2 (1.1)	63 (33.9)	120 (64.5)	4.62 ± 0.57
22	Architectural heritage contributes to a shared cultural identity and a sense of belonging in your community	1 (0.5)	0 (0.0)	4 (2.2)	87 (46.8)	94 (50.5)	4.47 ± 0.59
23	Cultural practices in your community, such as festivals and events are tied to architectural heritage sites in our community	1 (0.5)	0 (0.0)	4 (2.2)	89 (47.8)	92 (49.5)	4.46 ± 0.59
24	Architecture of historic buildings and landmarks reflects the cultural diversity and values of our community	1 (0.5)	0 (0.0)	1 (0.5)	78 (41.9)	106 (57.0)	4.55 ± 0.57

25	Local artists, artisans, and craftsmen are actively involved in the preservation and restoration of architectural heritage, keeping cultural traditions alive	1 (0.5)	3 (1.6)	7 (3.8)	93 (50.0)	82 (44.1)	4.35 ± 0.68

Table 1.0 shows that the respondents are in agreement that the following factors affect the conservation of architectural heritage: Unplanned restoration and retrofitting affect architectural heritage in South-East Nigeria (4.75), Rapid urbanization and unchecked development pose a problem to the architectural heritage in South-East Nigeria (4.61), Architectural heritage sites in South-East Nigeria are vulnerable to the effects of climate change, such as rising temperatures and extreme weather events (3.99), Adequate measures and resources be put in place to protect architectural heritage sites from the impacts of climate change, pollution, and natural disasters in our community (4.52), Preservation efforts for architectural heritage sites are often influenced by the political will and commitment of government officials (4.45), Heritage conservation projects are sometimes neglected or abandoned due to shifts in political leadership and government priorities (4.53), Political decisions, such as budget allocations and funding priorities, have a direct impact on the preservation of architectural heritage sites (4.47), There is a need for stronger legislation and enforcement of laws protecting architectural heritage sites (4.53), The engagement of community members and heritage advocates in the political process is essential for the preservation of architectural heritage (4.51), Economic benefits of heritage tourism, including increased revenue and job opportunities, make a valid case for investing in the preservation of architectural heritage (4.49), The potential economic value of architectural heritage, including adaptive reuse for commercial purposes, should be explored to ensure sustainability (4.48), Economic incentives and tax credits for property owners who maintain architectural heritage sites could be a viable solution to encourage preservation (4.44), and The economic benefits of architectural heritage preservation extend beyond immediate financial gains and contribute to the overall well-being of our community (4.52). Other factors include the following: A lack of economic viability and potential returns on investment can deter property owners from preserving architectural heritage sites (4.52), Public awareness and education about the historical and cultural value of architectural heritage sites are essential for their long-term preservation (4.49), The lack of skilled and qualified preservationist is a problem that affects sustainability of architectural heritage (4.28), Literacy campaigns and public awareness initiatives have been effective in promoting a deeper understanding of architectural heritage among residents (4.44), There is need for the use of digital and online resources to improved accessibility on information about architectural heritage in our region (4.46), Architectural heritage preservation is directly linked to the level of literacy and awareness in our community (4.37), Cultural neglect is a problem that affects architectural heritage (4.62), Architectural heritage contributes to a shared cultural identity and a sense of belonging in your community (4.47), Cultural practices in your community, such as festivals and events are tied to architectural heritage sites in our community (4.46), Architecture of historic buildings and landmarks reflects the cultural diversity and values of our community (4.55) and Local artists, artisans, and craftsmen are actively involved in the preservation and restoration of architectural heritage, keeping cultural traditions alive (4.35). However, the respondent disagrees that Natural disasters, such as earthquakes, floods, or hurricanes, has caused visible damage to architectural heritage sites in South-East Nigeria in recent years (2.48).

Table 2.0: KMO test of sampling adequacy and Bartlett's test of sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.925
Bartlett's Test of Sphericity	Approx. Chi-Square	1603.859
	df	300
	Sig.	<.001

Table 2.0 shows the Kaiser-Meyer-Olkin Measure of Sampling Adequacy to show the major factors affecting architectural heritage, the rotated component matrix (also called the rotated factor matrix in factor analysis) which is a matrix of the factor loadings for each variable onto each factor shows factor loadings greater than 0.5 and sorted by order of size. The result reveals five factors (components), with political factor being the first, while literacy factor, Economic factor, cultural factor, and environmental factor follows.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in the variables that might be caused by underlying factors. A value of 0.925 generally indicates that a factor analysis is appropriate for the data. Bartlett's test of sphericity indicates that the correlation matrix is not an identity matrix ($P < 0.001$), which means that the variables are related and therefore suitable for structure detection.

Table 3.0: Communalities

	Initial	Extraction
Unplanned restoration and retrofitting affect architectural heritage in South-East Nigeria.	1.000	.592
Rapid urbanization and unchecked development pose a problem to the architectural heritage in South-East Nigeria.	1.000	.438

Architectural heritage sites in South-East Nigeria are vulnerable to the effects of climate change, such as rising temperatures and extreme weather events.	1.000	.506
Natural disasters, such as earthquakes, floods, or hurricanes, has caused visible damage to architectural heritage sites in South-East Nigeria in recent years.	1.000	.821
Adequate measures and resources be put in place to protect architectural heritage sites from the impacts of climate change, pollution, and natural disasters in our community.	1.000	.544
Preservation efforts for architectural heritage sites are often influenced by the political will and commitment of government officials.	1.000	.494
Heritage conservation projects are sometimes neglected or abandoned due to shifts in political leadership and government priorities.	1.000	.435
Political decisions, such as budget allocations and funding priorities, have a direct impact on the preservation of architectural heritage sites.	1.000	.497
There is a need for stronger legislation and enforcement of laws protecting architectural heritage sites.	1.000	.499
The engagement of community members and heritage advocates in the political process is essential for the preservation of architectural heritage.	1.000	.541
Economic benefits of heritage tourism, including increased revenue and job opportunities, make a valid case for investing in the preservation of architectural heritage.	1.000	.679
The potential economic value of architectural heritage, including adaptive reuse for commercial purposes, should be explored to ensure sustainability.	1.000	.553
Economic incentives and tax credits for property owners who maintain architectural heritage sites could be a viable solution to encourage preservation.	1.000	.487
The economic benefits of architectural heritage preservation extend beyond immediate financial gains and contribute to the overall well-being of our community.	1.000	.521
A lack of economic viability and potential returns on investment can deter property owners from preserving architectural heritage sites.	1.000	.556
Public awareness and education about the historical and cultural value of architectural heritage sites are essential for their long-term preservation.	1.000	.546
The lack of skilled and qualified preservationist is a problem that affects sustainability of architectural heritage.	1.000	.607
Literacy campaigns and public awareness initiatives have been effective in promoting a deeper understanding of architectural heritage among residents.	1.000	.584
There is need for the use of digital and online resources to improved accessibility on information about architectural heritage in our region.	1.000	.426
Architectural heritage preservation is directly linked to the level of literacy and awareness in our community.	1.000	.418
Cultural neglect is a problem that affects architectural heritage.	1.000	.496
Architectural heritage contributes to a shared cultural identity and a sense of belonging in your community.	1.000	.351
Cultural practices in your community, such as festivals and events are tied to architectural heritage sites in our community.	1.000	.506
Architecture of historic buildings and landmarks reflects the cultural diversity and values of our community.	1.000	.538
Local artists, artisans, and craftsmen are actively involved in the preservation and restoration of architectural heritage, keeping cultural traditions alive.	1.000	.645

Extraction Method: Principal Component Analysis.

Communalities in table 3.0 indicates the amount of variance in each variable that is accounted for. Initial communalities are estimates of the variance in each variable accounted for by all components or factors. For principal components extraction, this is always equal to 1.0 for correlation analyses. Extraction communalities are estimates of the variance in each variable accounted for by the components. The communalities in this table are high (greater than 0.5) except for a few, which indicates that the extracted components represent the variables well. Age will therefore not load significantly and be excluded in the final rotated component matrix.

Table 4.0: Total variance explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.378	44.711	44.711	10.378	44.711	44.711	7.354	20.711	20.711
2	1.274	10.022	54.733	1.274	10.022	54.733	1.274	20.022	40.733
3	1.738	9.192	63.925	1.738	9.192	63.925	1.738	15.192	55.925
4	1.271	6.551	70.476	1.271	6.551	70.476	1.271	10.551	66.476
5	1.066	5.2814	75.757	1.066	5.2814	75.757	1.066	9.2814	75.757
6	.977	3.908	77.025						
7	.901	3.604	70.629						
8	.859	3.437	74.065						
9	.774	3.096	77.161						
10	.751	3.004	70.165						
11	.741	2.966	73.131						
12	.700	2.799	75.930						
13	.672	2.687	78.617						
14	.618	2.472	81.089						
15	.583	2.333	83.422						
16	.527	2.108	85.531						
17	.496	1.985	87.516						
18	.484	1.935	89.451						
19	.475	1.900	91.350						
20	.430	1.721	93.072						
21	.398	1.591	94.662						
22	.369	1.477	96.139						
23	.348	1.394	97.533						
24	.311	1.244	98.777						
25	.306	1.223	100.000						

Extraction Method: Principal Component Analysis.

In table 4.0, the Total column gives the eigenvalue, or amount of variance in the original variables accounted for by each component. The % of Variance column gives the ratio, expressed as a percentage, of the variance accounted for by each component to the total variance in all of the variables. So, factor

1 explains 44.7% of total variance, factor 2 explains 10.0%, factor 3 explains 9.2%, factor 4 explains 6.5% while factor 5 explains 5.3%. The first factor explains larger amount of variance whereas the rest of the factors explain smaller amounts of variance. According to Kaiser's criterion, retain all factors with eigenvalues above 1 and 0.6 average communality. Therefore, all factors with eigenvalues greater than 1 were extracted. The eigenvalues associated with these factors are again displayed and the percentage of variance explained in the columns labelled Extraction Sums of Squared Loadings. The cumulative percentage for the 5 derived components is 76%. They explain 76% of the variability in the original 25 variables, so we can considerably reduce the complexity of the data set by using these components, with only a 24% loss of information. In the final part of the table (labeled Rotation Sums of Squared Loadings), the eigenvalues of the factors after rotation are displayed. Rotation has the effect of optimizing the factor structure; however, some changes occurred after the rotation. The rotation maintains the cumulative percentage of variation explained by the extracted components, but that variation is now spread more evenly over the components. The changes in the individual totals suggest that the rotated component matrix will be easier to interpret than the unrotated matrix.

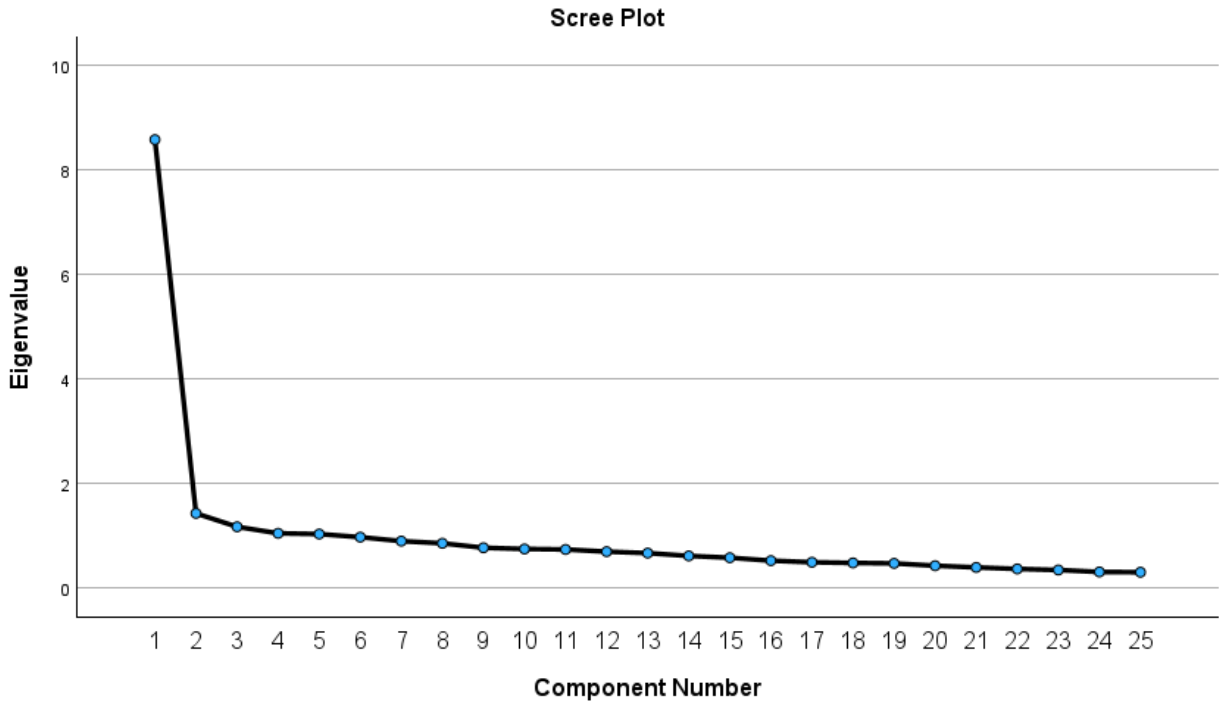

Figure 2.0: Scree plot showing the extracted 5 components.

The scree plot helps to determine the optimal number of components. The eigenvalue of each component in the initial solution is plotted. Generally, the first five components on the steep slope were extracted. The components on the shallow slope contribute little to the solution.

Table 5.0: Rotated Component Matrix indicating the extracted components and factor loadings

	Component				
	1	2	3	4	5
The engagement of community members and heritage advocates in the political process is essential for the preservation of architectural heritage.	.606				
There is a need for stronger legislation and enforcement of laws protecting architectural heritage sites.	.601				
Political decisions, such as budget allocations and funding priorities, have a direct impact on the preservation of architectural heritage sites.	.553				
Preservation efforts for architectural heritage sites are often influenced by the political will and commitment of government officials.	.503				
Architectural heritage preservation is directly linked to the level of literacy and awareness in our community.		.821			
Local artists, artisans, and craftsmen are actively involved in the preservation and restoration of architectural heritage, keeping cultural traditions alive.		.745			

The lack of skilled and qualified preservationist is a problem that affects sustainability of architectural heritage.	.635			
A lack of economic viability and potential returns on investment can deter property owners from preserving architectural heritage sites.		.828		
Economic benefits of heritage tourism, including increased revenue and job opportunities, make a valid case for investing in the preservation of architectural heritage.		.798		
The potential economic value of architectural heritage, including adaptive reuse for commercial purposes, should be explored to ensure sustainability.		.754		
The economic benefits of architectural heritage preservation extend beyond immediate financial gains and contribute to the overall well-being of our community.		.675		
Economic incentives and tax credits for property owners who maintain architectural heritage sites could be a viable solution to encourage preservation.		.551		
Public awareness and education about the historical and cultural value of architectural heritage sites are essential for their long-term preservation.			.679	
Architectural heritage contributes to a shared cultural identity and a sense of belonging in your community.			.661	
Adequate measures and resources be put in place to protect architectural heritage sites from the impacts of climate change, pollution, and natural disasters in our community.				.898
Natural disasters, such as earthquakes, floods, or hurricanes, has caused visible damage to architectural heritage sites in South-East Nigeria in recent years.				.871

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

The study shows that lack of maintenance of architectural heritage in Nigeria is influenced by various factors, ranging from unplanned restoration and retrofitting, rapid urbanization and unchecked development, lack of positive policies from government, stronger legislation and enforcement of laws to protect these architectural heritage sites etc. It is recognized that these challenges associated with preserving these cultural and historical treasures, if not tackled will lead to loss of our architectural heritage identity.

Conclusion

The conservation of architectural heritage contributes to sustainable development by rejuvenating historic areas, fostering tourism, and creating job opportunities in heritage conservation and related industries. Beyond preserving physical structures, it plays a crucial role in safeguarding intangible heritage such as traditional craftsmanship, architectural styles, and building techniques.

Safeguarding South-East Nigeria's architectural heritage requires collaborative efforts, informed decision-making, and a commitment to preserving our cultural legacy. By addressing these discernible patterns, we can ensure that future generations continue to appreciate and benefit from these architectural treasures.

Additionally, the implementation of sustainable maintenance practices should be a priority (Sodangi et al., 2014). These practices can encompass regular inspections, routine cleaning and maintenance, conservation treatments when necessary, and the use of environmentally friendly materials and technologies. By incorporating Critical Regionalism principles into the preservation and maintenance of architectural heritage in Nigeria, a more sustainable approach can be achieved (Barmelgy et al., 2016). This approach would consider the specific cultural, social, and environmental contexts of each region in Nigeria, ensuring that preservation efforts are tailored to the unique needs and

Recommendations

To address these challenges, a sustainable approach to architectural heritage maintenance and preservation is needed. This approach should include the integration of local communities and stakeholders in decision-making processes, capacity building and training programs for heritage professionals, the

establishment of effective legal frameworks for heritage protection, and the allocation of sufficient financial resources for maintenance and conservation efforts.

Public and private stakeholders must prioritize financial support to ensure the preservation of historical structures. Adequate policies and guidelines from the government, and also a robust framework should be provided to regulate maintenance activities that are essential in promoting and sustaining these heritages buildings.

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