## INCLUSIVE ARCHITECTURE STRATEGIES AND USER COMFORT IN THE DESIGN OF A COMMUNITY CENTRE, LAGOS MAINLAND

ODEWUMI, ANUOLUWA NISSI (16CA021162) B.Sc, Architecture, Covenant University, Ota, Ogun State

## INCLUSIVE ARCHITECTURE STRATEGIES AND USER COMFORT IN THE DESIGN OF A COMMUNITY CENTRE, LAGOS MAINLAND

 $\mathbf{BY}$ 

# ODEWUMI, ANUOLUWA NISSI (16CA021162) B.Sc, Architecture, Covenant University, Ota, Ogun State

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE (M.Sc) IN ARCHITECTURE OF THE DEPARTMENT OF ARCHITECTURE, COLLEGE OF SCIENCE AND TECHNOLOGY, COVENANT UNIVERSITY, OTA, OGUN STATE, NIGERIA

#### **ACCEPTANCE**

This is to attest that this dissertation is accepted in partial fulfilment of the requirements for the award of the degree of Master of Science (M.Sc) in the Department of Architecture, College of Science and Technology, Covenant University, Ota, Nigeria and has been accepted by the School of Postgraduate Studies, Covenant University, Ota, Ogun state.

Miss Adefunke F. Oyinloye (Secretary, School of Postgraduate Studies)

**Signature and Date** 

Prof. Akan B. Williams (Dean, School of Postgraduate Studies)

**Signature and Date** 

#### **DECLARATION**

I, ODEWUMI, ANUOLUWA NISSI (16CA021162) declare that this dissertation is a representation of my work and is written and implemented by me under the supervision of Dr. Bukola A. Adewale of the Department of Architecture, Covenant University, Ota, Nigeria. I attest that this dissertation has in no way been submitted either wholly or partially to any other university or institution of higher learning for the award of a master's degree. All information cited from published and unpublished literature has been duly referenced.

**ODEWUMI, ANUOLUWA NISSI** 

**Signature and Date** 

#### CERTIFICATION

This is to certify that this dissertation titled "INCLUSIVE ARCHITECTURE STRATEGIES AND USER COMFORT IN THE DESIGN OF A COMMUNITY CENTRE IN LAGOS MAINLAND" is an original research work carried out by ODEWUMI, ANUOLUWA NISSI (16CA021162) in the Department of Architecture, College of Science and Technology, Covenant University, Ota, Ogun State, Nigeria under the supervision of Dr. Bukola A. Adewale. This dissertation has met the required standard for the award of Master of Science (M.Sc) in Architecture.

Dr. Bukola A. Adewale (Supervisor)

**Signature and Date** 

Prof. Adedapo A. Oluwatayo (Head of Department)

**Signature and Date** 

Prof. Adetokunbo O. Ilesanmi (External Examiner)

Signature and Date

Prof. Akan B. Williams (Dean, School of Postgraduate Studies)

**Signature and Date** 

## **DEDICATION**

This thesis is dedicated to God, whose divine wisdom and guidance have sustained me throughout the research process. I am also grateful for the love and support of my family and Temi, who have been with me every step of the way.

#### ACKNOWLEDGEMENTS

First and foremost, I want to commence by expressing my gratitude to the Almighty God, who is the source of all existence and wisdom. I am grateful for God's favour, safety, and guidance during this study, particularly during my fieldwork.

I acknowledge the Chancellor of Covenant University, Bishop David O. Oyedepo for being such an inspiration to humanity, and the Vice-Chancellor of Covenant University, Prof. Adebayo H. Adebayo and all the various Community Centres in Lagos Mainland, Nigeria, who assisted me in allowing me to conduct my case studies and distribute my questionnaires.

I extend my deepest gratitude to my mother, Dr. Joy Odewumi, and my father, Prof. Samuel Odewumi, as well as Temitope Pinheiro and my siblings. Their unceasing prayers, steadfast love, financial support, encouraging words and unwavering presence have played a pivotal role in shaping every step I took in this research. I also extend my profound appreciation to my project supervisor, Dr. Bukola A. Adewale, and the Head of the Department, Prof. Adedapo A. Oluwatayo, for their tireless efforts in ensuring the success of this research and the entire program. I am especially thankful for their invaluable guidance, relentless support, and the wealth of knowledge and wisdom they have shared with me.

To the entire Covenant University community, including the School of Postgraduate Studies (SPS), College of Science and Technology (CST), and the Department of Architecture, I extend heartfelt thanks for your vital contributions to the approval and completion of this study. The collaborative efforts of tutors, scholars, and referenced academics were pivotal in this accomplishment, and I am sincerely grateful for your invaluable input.

Finally, I would like to express my gratitude to myself for my unwavering commitment and perseverance, seeking help when necessary, and having the grit to push through the tough times which resulted in the creation of a project that satisfies the requirements of the research community.

# TABLE OF CONTENTS

CON	TENTS	<b>PAGES</b>
ACC	EPTANCE	iii
DEC	LARATION	iv
	TIFICATION	V
	ICATION	vi
	NOWLEDGEMENTS	vii
	OF TABLES	xi
	OF PLATES	xii
	OF FIGURES	XV
	OF MAPS	xvii
	OF ABBREVIATIONS	xviii
ABST	ГКАСТ	xix
СНА	PTER ONE	1
INTE	RODUCTION	1
1.1	Background to the Study	1
1.2	Statement of the Research Problem	4
1.3	Aim and Objectives of the Study	6
1.3.1	•	6
1.3.2	<i>3</i>	6
1.4	Justification for the Study	6
1.5	The Client/Users	8
1.6	Scope of the Study	8
1.7	Limitations of the Study	8
1.8	Key Definitions and Concepts	9
СНА	PTER TWO	10
LITE	CRATURE REVIEW	10
2.1	•	10
2.1.1	•	10
2.1.2		20
	Inclusive Architecture Strategies	28
2.1.4	Building User Comfort	33
2.2	Empirical Reviews of the Study Area	39
2.2.1	Effects of Inclusive Architecture Strategies on Building User Comfort	39
2.2.2	Inclusive Architecture and User Comfort in Community Centre	42
2.3	Unique Solutions in Terms of Designs in the Study Area	47
2.4	Theoretical Framework	49
2.4.1	Theories Related to Inclusive Architecture	49
2.4.2	Theories Related to Building User Comfort	51
2.5	Conceptual Framework	52
2.6	Gans Identified in Literature	53

CHA	PTER THREE	55
RESE	EARCH METHODOLOGY	55
3.1	Research Philosophy	55
3.2	Research Approach	56
3.3	Research Design	56
3.4	Study Population	57
3.5	Choice of Sampling Method	59
3.6	Size of Sample	61
3.7	Unit of Data Collection	62
3.8	Data Collection Instruments	63
3.9	Operationalisation of Variables	64
3.10	Detailed Methodology	68
3.10.1	Objective 1	68
3.10.2	2. Objective 2	68
3.10.3	Objective 3	69
3.10.4	3	69
3.11	Design Of Research Instruments	70
3.11.1	Observation Guide	70
3.11.2	Questionnaire	71
3.12	Research Validity and Reliability	72
3.13	Ethical Considerations	72
CHA	PTER FOUR	74
RESU	JLTS AND DISCUSSIONS	74
4.1 Ol	bjective 2: Examine the Adoption of Inclusive Architecture Strategies in Co	mmunity
	es in the Study Area	74
	Case Study 1: Araromi Youth Development Centre, Gbagada	75
4.1.2	Case Study 2: Magodo Residents Association Community Centre	90
4.1.3	,	104
4.1.4	j j	116
4.1.5	Case Study 5: PJKita Community Centre	127
4.1.6	Case Study 6: Enabling Village, Singapore	137
4.1.7	Cross-Case Analysis of Case Studies	147
4.2	Objective 3: Determine the Inclusive Architecture Strategies Adopted in	-
	that can Enhance User Comfort in Community Centres	152
4.3	Site and Environmental Analysis	170
4.3.1	Background Knowledge of Isheri North, Kosofe	170
4.3.2	Site Location	172
4.3.3		172
4.3.4	Site Analysis	173
	PTER FIVE	179
	GN CRITERIA AND APPROACH	179
5.1	Objectives and Goals of the Project	179
5.2	Functional and Space Criteria	179
5.2.1	Spaces, sizes, and relationships	180
5.2.2	Equipment and Operational Requirements	183
5.2.3	Performance Requirements	185
5.3	Technological and Environmental Criteria	186
5.3.1	Materials and Finishes	187

5.3.2	Services	187
5.3.3	Environmental Criteria	188
5.4	Legal and Planning Regulations	188
5.5	Behavioural and Aesthetics Criteria	189
5.5.1	Materials	189
5.5.2	Building Form/Shape	189
5.5.3	Cost	189
СНА	PTER SIX	190
DESI	GN PHILOSOPHY, CONCEPTUALISATION AND PROPOSAL	190
6.1	Concepts and its Justification	190
6.2	Design Development Process	190
6.2.1	Site zoning	190
6.2.2	Bubble Diagrams	192
6.2.3	Flow Charts	192
6.2.4	Circulation Pattern	193
6.2.5	Design Concept	193
6.2.6	Design Proposal	194
REFI	ERENCES	195
APPI	ENDIX I: OBSERVATION GUIDE	211
APPENDIX II: QUESTIONNAIRE APPENDIX III: ETHICAL APPROVAL		215
		218
APPENDIX IV: PRESENTATION DRAWINGS		219

# LIST OF TABLES

<b>TABLES</b>	TITLE OF TABLES	<b>PAGES</b>
<b>Table 3.1</b> :	List of Community Centres in Lagos Mainland	57
<b>Table 3.2</b> :	List of Selected Community Centres	61
<b>Table 3.3</b> :	Questionnaire Distribution Across Selected Community Centres	62
	Questionnaire Distribution between Users and Staff of the Community	Centres
		63
<b>Table 3.5</b> :	Operationalisation of Variables	64
<b>Table 3.6</b> :	Research Instrument Reliability Test	72
<b>Table 4.1:</b>	Key Spatial Features of Araromi Youth Development Centre, Gbagada	77
<b>Table 4.2</b> :	Case Study 1 - Adoption Level of Inclusive Architecture Strategies	81
<b>Table 4.3</b> :	Key Spatial Features of Magodo Residents Association Community Ce	ntre 92
<b>Table 4.4</b> :	Case Study 2 – Adoption Level of Inclusive Architecture Strategies	95
<b>Table 4.5:</b>	Key Spatial Features of Ikeja Youth Centre	106
<b>Table 4.6</b> :	Case Study 3 – Adoption Level of Inclusive Architecture Strategies	109
<b>Table 4.7</b> :	Key Spatial Features of Billère Community Centre	118
<b>Table 4.8</b> :	Case Study 4 - Adoption Level of Inclusive Architecture Strategies	121
<b>Table 4.9</b> :	Key Spatial Features of PJKita Community Centre	130
	: Case Study 5 – Adoption Level of Inclusive Architecture Strategies	132
	: Key Spatial Features of Enabling Village	139
	: Case Study 6 - Adoption Level of Inclusive Architecture Strategies	141
	: Cross-case Analysis of Indigenous Case Studies	148
	: Cross-case Analysis of Foreign Case Studies	149
	: Cross-case Analysis of All Case Studies	150
	: Socio-demographic characteristics of the respondents	153
	: Category 1 - Respondents Evaluation Chart	155
	: Category 2 - Respondents Evaluation Chart	156
	: Category 3 - Respondents Evaluation Chart	157
	: Category 4 - Respondents Evaluation Chart	158
	: Category 5 - Respondents Evaluation Chart	159
	: Category 6 - Respondents Evaluation Chart	159
	: Category 7 - Respondents Evaluation Chart	160
	: Category 8 - Respondents Evaluation Chart	161
	: General Building User Comfort Levels in Selected Community Centre	
	: Model Summary of Categorical Regression Analysis on General Build	_
Comfort		165
	: Analysis of Variance of Categorical Regression Analysis on General I	_
User Comf		165
	: Categorical Regression between Inclusive Architecture Strategies and I	_
User Comf		166
	Recreational Areas	180
	Institutional Areas	180
	Commercial Areas	181
	Cultural Areas	181
Table 5.5:	Ancillary Areas	183

# LIST OF PLATES

PLATES	TITLE OF PLATES	<b>PAGES</b>
Plate 4.1	: Youth Hub Entrance	75
Plate 4.2	: Main Entrance Signage	76
Plate 4.3	: Case Study 1 - Game Room	77
Plate 4.4	: Case Study 1 - Sports Stadium	77
Plate 4.5	: Case Study 1 - Counselling Room	77
Plate 4.6	: Case Study 1 - Outdoor Space for Displaying and Selling Items	78
<b>Plate 4.7</b>	: Case Study 1 - Partition Boards	78
Plate 4.8	: Case Study 1 - Main Entrance Ramp to Youth Hub	78
Plate 4.9	: Case Study 1 - Entrance Ramp to Toilet Building	78
	0: Case Study 1 - Restroom Building	79
Plate 4.1	1: Case Study 1 - Reception Area	79
Plate 4.1	2: Case Study 1 - Storage Cabinets Located in the Reception	79
	3: Case Study 1 - Youth Hub Ground Floor Plan	80
	4: Case Study 1 - Parking Area Close to the Hub	81
	5: Case Study 1 – Obstructed Entrance Parking	81
	6: Case Study 1 – Straight and Unobstructed Path	82
	7: Case Study 1 – Urban Furniture	82
	8: Case Study 1 – Contrasting Edge Guides	82
	9: Case Study 1 – Seating Provided After Entrance Ramp	83
	0: Case Study 1 – Toilet Block Ramp	83
	1: Case Study 1 – No Floor Level Change	83
	2: Case Study 1 – Absence of Sharp Corners	84
	3: Case Study 1 – Interior Space	84
	4: Case Study 1 – Typical Window Division	84
	5: Case Study 1 – Loose Furniture Pieces	85
	6: Case Study 1 – Main Entrance Door	85
	7: Case Study 1 – Alternate Entry and Exit	86
	8: Case Study 1 –Building Entrance Close to Reception	86
	9: Case Study 1 – Entrance Door with No Threshold	86
	0: Case Study 1 – Wall Murals	87
	1: Case Study 1 – Plainly Painted Wall	87
	2: Case Study 1 – Interior Lighting	87
	3: Case Study 1 – Anti-Skid Flooring	87
	4: Case Study 1 – Entrance Door and Furnishing	88 88
	5: Case Study 1 – Interior Wall and Floor 6: Case Study 1 – Smooth Ground Surface	88
	7: Case Study 1 – Smooth Ground Surface 7: Case Study 1 – Warning Light	89
	8: Case Study 1 – Warming Light  8: Case Study 1 – Visual Signage	89
	9: Case Study 1 – Visual Signage	89
	0: Magodo Residents Association Community Centre Entrance	90
	1: Case Study 2 - Table Tennis Area	92
	2: Case Study 2 - Table Tellins Area  2: Case Study 2 - Unmarked Parking Lot	92
	2: Case Study 2 - Main Entrance to Event Hall Ramp	92
	4: Case Study 2 – Restroom Block	93
	5: Case Study 2 – Main Event Hall	93
	6: Case Study 2 - Ground Floor Plan	94
	7: Case Study 2 – First Floor Plan	94

Plate 4.48: Case Study 2 – Unobstructed Facade	95
Plate 4.49: Case Study 2 – Straight and Unobstructed Path	95
Plate 4.50: Case Study 2 – External Ramp Railing Guide	96
Plate 4.51: Case Study 2 – External Steps	96
Plate 4.52: Case Study 2 – Internal Staira	97
Plate 4.53: Case Study 2 – Building Ramp	97
Plate 4.54: Case Study 2 – Presence of Sharp Corners	98
Plate 4.55: Case Study 2 – Interior Space	98
<b>Plate 4.56</b> : Case Study 2 – Typical Window Division	98
Plate 4.57: Case Study 2 – Typical Internal Door	99
Plate 4.58: Case Study 2 – Toilet functions Placed Together	99
Plate 4.59: Case Study 2 – Main Entrance Door	100
<b>Plate 4.60</b> : Case Study 2 – Alternate Entry and Exit	100
<b>Plate 4.61</b> : Case Study 2 – Entrance Door with Threshold	100
<b>Plate 4.62</b> : Case Study 2 – Difference in Outdoor and Indoor Levels	101
Plate 4.63: Case Study 2 – Interior Lighting	101
<b>Plate 4.64</b> : Case Study 2 – Anti-Skid Flooring	101
Plate 4.65: Case Study 2 – Matte Flooring	102
<b>Plate 4.66</b> : Case Study 2 – Absence of Busy Patterns	102
<b>Plate 4.67</b> : Case Study 2 – Interior Wall and Floor	102
Plate 4.68: Case Study 2 – Smooth Ground Surface	103
<b>Plate 4.69</b> : Case Study 2 – Visual Signage (a)	103
Plate 4.70: Case Study 2 – Visual Signage (b)	103
Plate 4.71: Case Study 2 – Interior Space	104
Plate 4.72: Ikeja Youth Centre Entrance	105
Plate 4.73: Ikeja Centre Main Entrance Signage	105
Plate 4.74: Case Study 3 – Football Turf	106
<b>Plate 4.75:</b> Case Study 3 – Basketball Court	106
<b>Plate 4.76:</b> Case Study 3 – Redcross Room/Computer Lab	107
Plate 4.77: Case Study 3 – Unmarked Parking Lot	107
Plate 4.78: Case Study 3 –Entrance Ramps	107
Plate 4.79: Case Study 3 – Restroom Block Outside	107
Plate 4.80: Case Study 3 – Event Hall	108
Plate 4.81: Case Study 3 – Ground Floor Plan	108
Plate 4.82: Case Study 3 – Unobstructed Facade	109
Plate 4.83: Case Study 3 – Straight and Unobstructed Path	109
Plate 4.84: Case Study 3 – Urban Furniture	110
Plate 4.85: Case Study 3 – External Ramp Railing Guide	110
Plate 4.86: Case Study 3 – Contrasting Edge Guides	110
Plate 4.87: Case Study 3 – Event Hall Ramp	111
Plate 4.88: Case Study 3 – Change in Level	111
Plate 4.89: Case Study 3 – Absence of Sharp Corners	111
<b>Plate 4.90</b> : Case Study 3 – Typical Window Division	112
Plate 4.91: Case Study 3 – Loose Furniture Pieces	112
Plate 4.92: Case Study 3 – Typical Internal Door	112
Plate 4.93: Case Study 3 – Entrance Door with Threshold	113
Plate 4.94: Case Study 3 – Interior Lighting	113
Plate 4.95: Case Study 3 – Anti-Skid Flooring	114
<b>Plate 4.96</b> : Case Study 3 – Reflective Flooring	114
Plate 4.97: Case Study 3 – Absence of Busy Patterns	114
xiii	
AIII	

Plate 4.98: Case Study 3 –Outdoor Ground Surface	115
Plate 4.99: Case Study 3 –Signage	115
Plate 4.100: Case Study 3 –Interior Space	115
Plate 4.101: North Side of Site	177
Plate 4.102: East Side of the Site	177
Plate 4.103: Main Access Road of the Site	178

# LIST OF FIGURES

FIGURE	S TITLE OF FIGURES	PAGES
	1: Future Roles for Community Centres	14
_	2: Functional Spaces in a Community Centre	17
Figure 2.	3: A milestone timeline of the evolution of Inclusive Design	23
	4: IEQ Components	34
Figure 2.	5: School for the Blind and Visually Impaired Children	48
	6: Conceptual Framework	53
Figure 4.1	1: Billère Community Centre Entrance	116
Figure 4.2	2: Billère Community Centre Main Entrance Signage	117
Figure 4.3	3: Site Layout of Billère Community Centre	117
Figure 4.4	4: Case Study 4 – Typical Activity Room	118
Figure 4.	5: Case Study 4 – Nursery	118
Figure 4.0	6: Case Study 4 – Stairwell	118
_	7: Case Study 4 – Activity Room for Meetings	119
0	8: Case Study 4 – Reception Area	119
_	9: Case Study 4 – Ground Floor Plan	120
0	<b>10</b> : Case Study 4 – First Floor Plan	120
_	11: Case Study 4 – Clear Unobstructed Facade	121
U	12: Case Study 4 – Straight and Unobstructed Path	121
0	13: Case Study 4 – Building Ramp	122
_	14: Case Study 4 – Absence of Level Change	122
_	15: Case Study 4 – Presence of Sharp Corners	123
U	16: Case Study 4 – Interior Space	123
_	17: Case Study 4 – Typical Window Division	123
0	18: Case Study 4 – Furniture Placement	123
0	19: Case Study 4 – Typical Internal Door	124
0	20: Case Study 4 – Doors	124
0	21: Case Study 4 – Entrance Door	124
_	22: Case Study 4 – Activity Room Painted Green	125
0	23: Case Study 4 – Nursery Painted Yellow	125
	24: Case Study 4 – Interior Lighting 25: Case Study 4 – Stair Tactile Guides	125 125
	26: Case Study 4 – Stair Tactile Guides 26: Case Study 4 – Absence of Busy Patterns	123
_	27: Case Study 4 – Absence of Busy Fatterns 27: Case Study 4 – Acoustic Ceiling	126
_	28: Case Study 4 – Acoustic Centing 28: Case Study 4 – Smooth Ground Surface	126
_	29: Case Study 4 – Shooth Ground Surface 29: Case Study 4 – Visual Signage	120
_	30: Case Study 4 – Visual Signage	127
_	31: PJKita Community Centre Entrance	128
0	32: PJKita Community Centre Facade	128
_	33: Case Study 5 – The Spine	130
0	34: Case Study 5 – Façade showing Ramps and Stairwells	130
_	35: Conceptual Diagram	131
0	<b>36</b> : Case Study 5 – Façade	132
_	37: Case Study 5 – External Ramp Railing Guide	132
_	38: Case Study 5 – External Stairs Railing Guide	132
0	39: Case Study 5 – Vertical Circulation System	133
U	<b>40</b> : Case Study 5 – Avoidance of Change in Levels	133
0	11: Case Study 5 – Absence of Sharn Corners	134

Figure 4.42: Case Study 5 – Interior Space	134
<b>Figure 4.43</b> : Case Study 5 – Typical Window Division	134
Figure 4.44: Case Study 5 – Accessible Toilet	134
<b>Figure 4.45</b> : Case Study 5 – Indoor-Outdoor Level	135
<b>Figure 4.46</b> : Case Study 5 – Lighting	135
<b>Figure 4.47</b> : Case Study 5 – Anti-Skid Flooring	136
Figure 4.48: Case Study 5 – Absence of Busy Patterns	136
Figure 4.49: Enabling Village Façade	137
Figure 4.50: Wayfinding Enabling Village	138
Figure 4.51: Location and Site Layout of Enabling Village	138
Figure 4.52: Case Study 6 – Playground Area	139
Figure 4.53: Case Study 6 – Art Academy	139
Figure 4.54: Case Study 6 – Café	139
Figure 4.55: Case Study 6 – Parking Lot	139
<b>Figure 4.56:</b> Case Study 6 – Vertical Circulation	140
Figure 4.57: Case Study 6 – Multipurpose Conference Room	140
<b>Figure 4.58:</b> Case Study 6 – Amphitheatre	140
Figure 4.59: Master Plan	141
Figure 4.60: Case Study 6 – Obstructed Façade	141
<b>Figure 4.61:</b> Case Study 6 – Straight and Unobstructed Path	142
Figure 4.62: Case Study 6 – Urban Furniture	142
Figure 4.63: Case Study 6 – External Ramps	142
Figure 4.64: Case Study 6 – External Steps	142
Figure 4.65: Case Study 6 – Internal Ramps	143
Figure 4.66: Case Study 6 – Presence of Sharp Corners	143
Figure 4.67: Case Study 6 – Interior Space	144
<b>Figure 4.68:</b> Case Study 6 – Typical Window Division	144
Figure 4.69: Case Study 6 – Internal Doors	144
<b>Figure 4.70:</b> Case Study 6 – Reading Areas	145
Figure 4.71: Case Study 6 – Entrance Door	145
Figure 4.72: Case Study 6 – Building Lighting	145
Figure 4.73: Case Study 6 – Stair Tactile Guides	146
Figure 4.74: Case Study 6 – Acoustic Boards	146
Figure 4.75: Case Study 6 – Smooth Ground Surface	146
Figure 4.76: Case Study 6 – Acoustic Boards	147
Figure 4.77: Image Showing the Selected Site and Surrounding Landmarks.	172
Figure 4.78: Climate and Average Weather Year-Round in Kosofe	174
Figure 4.79: Average Monthly Rainfall in Kosofe	175
Figure 4.80: North-South Site Section	176
Figure 4.81: East-West Site Section	176
Figure 6.1: Site Zoning Privacy	191
Figure 6.2: Site Zoning Noise	191
Figure 6.3: Bubble Diagram Showing Typical Spatial Layout	192
Figure 6.4: Flow Chart of a Typical Floor	192

# LIST OF MAPS

<b>MAPS</b>	TITLE OF MAPS	<b>PAGES</b>
Map 4	.1: Location and Site Layout of Araromi Youth Development Centre	76
Map 4	.2: Location and Site Layout of Magodo Residents Association Communi	ity Centre
		91
Map 4	.3: Location and Site Layout of Ikeja Youth Centre	106
Map 4	.4: Location and Site Layout of PJKita Community Centre	129
Map 4	.5: Map of Kosofe showing Isheri (red circle)	171
Map 4.	.6: Map of Isheri North, Showing the Project Site	171

### LIST OF ABBREVIATIONS

**AIA** American Institute of Architects

**ASHARE** American Society of Heating, Refrigerating, and Air-Conditioning

Engineers

CIM City Information Model

DfA Design for All DfN Design for Need

**HND** Higher National Diploma

IAQ Indoor Air Quality ID Inclusive Design

ICT Information and Communication Technology

**IEQ** Indoor Environmental Quality

**ISO** International Organisation for Standardization

IVE Immersive Virtual Environment IVR Immersive Virtual Reality

LCDAsLocal Council Development AreasPwDPersons Living with DisabilitiesSDGSustainable Development Goal

#### **ABSTRACT**

Community centres are vital community assets that foster interpersonal relationships, interdependence, and civic involvement. This study aimed to investigate the adoption of inclusive architecture strategies and their potential to enhance building user comfort with the purpose of applying lessons learnt in the design of a community centre in Lagos Mainland, Nigeria. The study's primary focus is inclusiveness, specifically addressing the needs of all individuals with and without disabilities, particularly those with mobility, sight, and hearing impairments. This research adopts a pragmatic philosophy, employing mixed methods and a qualitative approach to explore inclusive architecture strategies for user comfort in a Lagos Mainland community centre. Utilising a multi-stage sampling method, the study focused on 307 respondents from three community centres, utilising questionnaires, observation guides, and case studies to comprehensively gather data within the study area. The scope of this study encompasses considerations for diverse demographic needs, disabilities, and socio-economic statuses. By employing inclusive architecture strategies, this study's results revealed new opportunities for creating community facilities that are both inclusive and comfortable. The findings of this study benefit a wide range of stakeholders, including residents, architects, designers, developers, and the broader community within Lagos Mainland, Nigeria.

Keywords: Comfort, Community Centre, Inclusive Architecture, Lagos Mainland.