# Nexus of Place Dependence and Public Spaces' Utilization in Nigeria

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***Abstract*: The significance of public spaces' use is attributed to the users' physical and functional satisfaction through place identity. This study explores whether the usage of public space in the rural areas is related to the users' physical and functional connection through the place identity, dependence, and familiarity across various social attributes of the rural area. The assessments of 382 users of public space who are residents and non-residents on their connections to the market squares (as a typical aspect of public space) were documented through Structural Equation Modelling (SEM) analysis (version 22) of the three case studies markets. The result of thefactor analysis and multiple regressionuncovered that there are positive connections between users' familiarity with the market (PLF), dependence (PLD), an identity with the market (PID), and markets' usage (OSU). Ultimately, clients' dependence with the market (PLD) advocated partial mediation impacts in the connection between users' place identity (PID) and market square use (OSU) in the three contextual investigation areas, with estimations of 83% (Ijebu-jesa neighbourhood), 87% (Ijeda neighbourhood), and 80% (Iloko neighbourhood) of square correlations (R2). These represented the rates of variance explained in each area's model builds that are over 80% square correlations (R2). These justified an excellent expectation of the construct in every regions. Suggestions for stakeholders and administrators are examined, which affirmed the upgrade of the public space regions, empowering the users' patterns, and improved planning and design methodologies.**

***Keywords:*** **Publicspace, Place Attachment, Place Dependence, Structural Equation Modelling, Nigeria**

## I. INTRODUCTION

The modes of design, planning techniques, arrangements, and the management of public spaces are significant in the contemporary modern days of public spaces. Another significant milestone accomplishment set up by scholars is a perspective on improving the environment. Considering this, adequate consideration of users' activity and movement is relevant when efforts are being geared to achieving great public spaces (Shackell et al., 2008; Carmona, 2010).

The various meanings of public space have been documented by scholars; notwithstanding, the definite meaning of public space depicts being accessible by different ethnic groups (Dines & Cattel, 2006; Peter et al., 2010; Agboola and Rasidi, 2018). Similarly, defining public space dwelt with its provision of freedom of expression, and opportunity activity patterns (Altman and Zube, 1989; Carr, et al., 1992). Nemeth and Schmidt, (2007), asserted the ideas of ownership and management of the public spaces. It is the standard idea that scholars claimed that public space debilitatesthe openness of general society, while privately owned on the other hand is made exclusive. However, this current investigation of the meanings of the market square as public space is vested in Oldenburg's depiction as a public gathering situated away from the home and work environment (Oldenburg, 1991; 2002). Hence, public space's areas portray their attributes either as open or private (Nemeth and Schmidt, 2007).

Essentially, the recent cultural interpretations of the market place (Oja) as a third-place other than the home or workspace were similarly avowed by Agboola et al., (2015; 2016). The authors attested marketplace as a place that offers open doors for social contact among major actors. The cultural heritage meaning interplays between the tangible and intangible components (Agboola et al., 2015). The tangible culture incorporates structures, landmarks, and scenes. Considering this, public space incorporates parks, courts, walkways, and shopping centers, (Altman and Zube, 1989; Carr et al., 1992; Oldenburg, 1989).

Similar examinations concerning public space are on-going in the study of the human and place relationship. For example, Francis (1989); Gehl (1987) and Bonilla, (2013) affirmed that a concrete relationship exists among individuals and their environment through human activity, visual contribution, and qualities. Hence, it is relevant to express that little published literature has explored the significance of mediating role of place dependence in users' identity and market square's use in respect to Nigerian public space. This investigation targets the interceding part of users' reliance on the market square using an attachment connection hypothesis.

From the aforementioned, four research objectives are stated below:

*RO1:* To explore the connections among the four open space factors (place identity, place dependence, place familiarity, and open space usage) for markets in Ijebu-jesa, Iloko, and Ijeda)

*RO2:* To determine the mediating role of place dependence (PLD) between the construct of place identity (PID) and markets' usage (OSU) in Ijebu-jesa area.

*RO3:* To examines the mediating role of place-dependence (PLD) between the build of place identity (PLD) and markets' usage (OSU) in Iloko area.

*RO4:* To uncover the mediating role of place-dependence (PLD) between the construct of place identity (PLD) and markets' use (OSU) in Ijeda area.

## II. REVIEWS OF LITERATURES

### *2.1 Human and Public space connections*

Past studies have deliberated on the related views that depict human-environment association through the emotional experience of the place. This incorporates place identity (Proshansky et al., 1983), place dependence (Stokols and Shumaker 1981), place connection (Moore and Graefe 1994; Williams et al., 1992), place bonding (Hammitt et al., 2004), and sense of place (Jorgensen and Stedman 2001, 2006). The variety of place concept means the multi-dimensionality of the construct; in which scholars have elaborated as enthusiastic, psychological, and social terms (Low and Altman 1992; Lewicka, (2010; 2011). Nonetheless, lucidity on place theories characterized the accompanying key ideas: (i) Place attachment connection which is often time utilized conversely with an attachment of place. It is an individual identification with an area or scene (Williams, et al., 1992; Eisenhauer, et al., 2000).

Place attachment alludes to people-place connections that exude from specifiable states place and qualities of individuals (Shumaker and Taylor. 1983). Place attachment characterizes the manners by which individuals associate with different places. Then again, place identity connotes groups' connection in terms of passionate or emblematic implications. Place identity is a sub-structure of an individual's self-character and feelings created through regular encounters in an actual physical environment.

Place identity emanates from the different manners by which place gives a feeling of emotional connections. It alludes to a connection dependent on users' capacity and allowable activities. As such, the place dependence relies upon its capacity to fulfill the necessities or conduct objectives of an individual or gathering when contrasted with other place options (Stokols, and Shumaker. 1981). Place meaning dependent on comprehensions, as individual hugeness, with an actual physical setting (Stedman, 2002; 2003). Familiarity with a place doubtfully could build the peoples' solidarity of connection (Ahlbrandt, 1984; Earthy colored, et al., 2003; Lalli,1992).

Studies uncover that individuals feel more calm in the public that granting social connections, permit people's insight, where quality is seen regarding estimating the social nature of human existence (Adevi and Grahn 2011; Mehan, A, 2016). The viable usage of public space depended on its arrangement of the basic enhancements fit for improving ethnics 'cooperation and social bonding. Agboola and Rasidi, (2018) noticed that the utilization of the market square relies upon peoples' aggregate activities that make a social feeling of place and time.

Public space, for example, market square constantly empowers an actual setting scene for collaboration between numerous ethnic societies. In this manner, is the upgrades association between the actual provincial scene and individuals' visual and social insight (Bianchini et al., 2007). On the side of this, the markets' sectors' scene was made out of nearby pictures of an area, which recognized the visual expressions, legends, and customs. In the light of this, available open spaces, for example, the market square could improve social attachment and collaboration through the inundation of more users. Concisely, accessibility to facilities remains a foundation of sustainable social and economic value.

The conceptual model of the usage of the market square is presented in Figure 1. It elaborate four components namely: (i) the social-segment qualities of users (ii) the luxuries, for example, scene plan, vegetation, and land use, (iii) the social scene arrangement, for example, land-use practices, and its developments, and (iv) residents' insights regarding openness, security, and resilience. Moreover, the inhabitants' readiness to share the market square with other groups could advance network neighborliness and assists with building up a feeling of network. Regarding the markets' area, well-planned, and manageable one could meet the yearning and aspirations of different age classes that could promote users' personal satisfaction, and alluring conditions (Agboola and Rasidi, 2018; Agboola, and Oluyinka 2019).

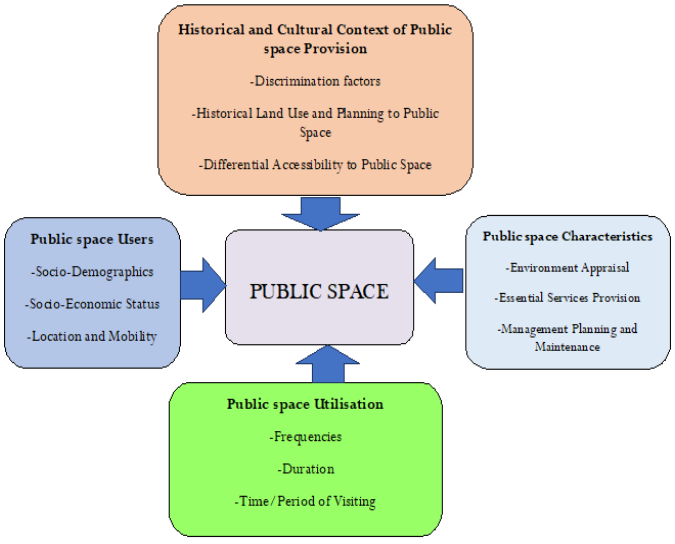


Figure 1: Relationships between market users' views, utilization, and characteristics.Adapted: Byrne and Wolch (2009)

Traditional markets function not only as a business community; rather it goes about as a socio-culture collaboration and of blended activities (Sunarto et. al., 2020). The priority of public space depends on the level of peoples' activities which could be discretionary or social. Emotional connection to marketplace is an impression of the individual's inclusion in different activities in the space. In Nigeria, the market square facilitated a colony of various activities on the market days. As a shared space, it manages the cost of economic, social, sporting, and religious exercises at various seasons (Figure 2).

The marketplace is where business and cultural activities occur, which might be every day or intermittently, also, social exercises happen occasionally. Similarly, some portion of the activities might be inside and at the fringe of the market premises. Adejumo et al., (2012) opines that three major religious activities may happen in the market place, namely: (i) religious activities; (ii) cult-related activities, especially when an incumbent king died; and (iii) activities identifying with the appeasement of divinity's inhabitant. The cultural aspect of activities associates with the exhibition of peoples' personalities for social cooperation and connections (Zakariya, 2016). As reviewed by Jackson et. al (2006) and Kazmierczak, (2013), the marketplace is a social environment that grants sensible administrations and encounters that positively affect users' social relations and potential for creating social ties.


Figure 2: Hosts of activities involved in the market square within the metropolis. Source: Researcher's field work

## III. METHODOLOGY

### *3.1 Sampling and Survey administrations*

The data was gathered utilizing on-site surveys based on a stratified random sampling of the respondents from the neighbourhoods' marketplace of the same climatic and topographical settings in the south-west, Nigeria. Stratified random sampling, which requires stratifying a given populace before applying random sampling across the stratum, was adopted for successful data collection (Creswell, 2012). The respondents' encounters and insights were documented through the content of the questionnaires that indicates the individual information, markets' character, reliance, commonality, and use. The self-circulation of the survey was done between Monday, seventh July 2014 and Monday, thirteenth October 2014. The three-case study towns covered by this study hosted separate periodic markets.

Subsequently, the distribution of the survey poll was done on each market day namely: Ijebu-jesa, Iloko-ijesa, and Ijeda markets (see figure 3). The distribution periods were between 7 am to 12noon and 1 pm to 6 pm. These were the periods when the bi-hive of activities at the marketplace was at its top on each market day. The distribution of the survey polls was undertaken by eight research assistants that were previously coached, tutored enough on the activity.

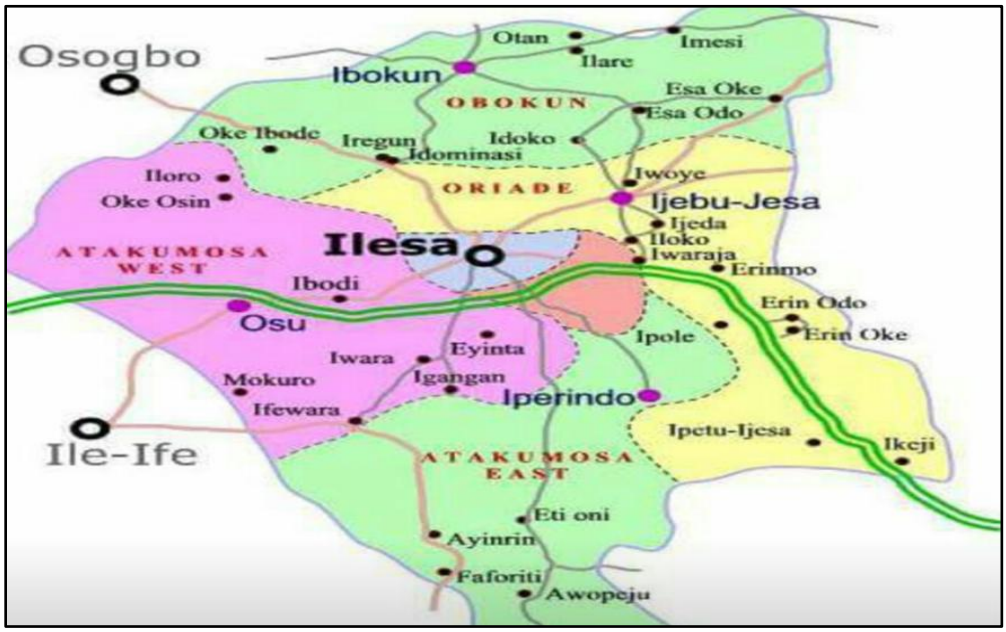


Figure 3: Case study location map.

Source: https://www.google.com/search?q=map+of+ijebu-jesa+town

*3.2 Variables measurements and analysis*

In the past investigation of neighborhood open space in the multi-ethnic areas of Nigeria by Agboola et al. (2015), the variables of inhabitants' dependence on open space usage were validated, tested, and approved. The exploration set up residents' dependence is a functional attachment that exhibited the degree of the marketplaces' actual qualities, openness, and preference. In another study, there is proof that users' setting experience plays the main consideration in the formation of place attachment. The study of Backlund and Williams (2004) uncovered a weak moderate positive correlation between two dimensions of place attachment (i.e., place identity and place dependence).

Past researchers have indicated that place attachment influences numerous dependent variables (Bricker and Kerstetter 2000; Budruk et al., 2008; Kyle et al., 2003; Kyle et al., 2004; Vaske and Korbin 2001; Warzecha and Lime 2001). In a similar vein, Kyle et al., (2003) explored the connection between place connection and visitors' perspectives toward recreation. It was hypothesized that place identity and dependence would moderate the connection among visitors'behavior.

Significantly, Bricker and Kerstetter (2000) explored the connection between specialization among recreationists and the two variables of place attachment. Place dependence was contrarily identified with specialization, though place identity was positively related. In an examination on Appalachian Trail (AT) hikers, Kyle et al., (2004) found that as place identity expanded, respondents' antagonistic view of crowding upsurges. As place dependence is on the increase, so also is the respondents' assessment of place turned out to be more ideal. Budruk et al., (2008) affirmed that place identity was a significant predictor of visitors' impression of realness at a Native American Cultural tourism destination. A comparative investigation of Kyle et al., (2004) analyzed the impacts of place attachment on visitors' impression of social and natural conditions along the AT. The outcome uncovered that visitors with a higher perception of place identity were more reproachful of social and ecological conditions along the AT.

While a few studies have explored in testing hypotheses among the attachment factors, hardly any studies have been targeting the mediating role of place identity between users' dependence (independent variable) and the utilization of the market square (dependent variable). Likewise in continuation to the tested place identity (independent variable) and place dependence (independent variable) in the investigation of Bricker and Kerstetter (2000) and Kyle et al, (2003), this examination added place familiarity as another indispensable independent variable and the users' usage of the market square (dependent variable ). In summary, four variables of place identity (PID), place dependence (PLD), place familiarity (PLF), and open space use (OSU) were associated with this investigation. The respondents were approached to rate their reactions on the Likert scale from Strongly Agree (SA) "5"; Agree (AG) "4"; Neutral (NE) "3" to Disagree (DA) of "2"; Strongly disagree (SD) "1", respectively.

Structural Equation Modelling (SEM)statistical tool in conjunction with Principal Components Analysis (PCA) and Exploratory Factor Analyses (EFA) were measurable apparatus that were used in the hypothesis assumptions (Anderson &Gerbing, 1998). Earlier, gathered data were screened for missing values, which represented 1% of the

information gathered. Missing qualities were supplanted utilizing series means. Variables were screened for skewness and kurtosis and changed to normalized skewed distributions. While measuring the place attachment, respondents were approached to rate the degree to which they concurred or otherwise with the sixteen statements representing four theorized dimensions of place attachment. The measurement items were measured on a five "5" point Likert scale as adopted by the previous work of Kyle et al., (2004).

The place attachment construct has gone through satisfactory hypothetical operationalization. Afterward, factor analysis was used to create latent constructs for each dimension of place identity, dependence, familiarity, and open space usage with multiple observed indicators. However, few studies have been carried out on users' perception of market places' measurement in the Nigerian context; therefore principal components factor analysis was adopted. Eventually, Eigenvalues of 1.0, and Inter-item correlations of .40 were achieved. Codes and instrument adopted were depicted in Table 1.

Table 1: Measurement instrument adopted.

| No | Instruments | Code |
|---|---|---|
| Place identity | | (PID)- |
| Independent | Market square means a lot to me | PID1 |
| | I am attached to the market square | PID2 |
| | I identify strongly with the market square | PID3 |
| | I have a lot of memories of the market square | PID4 |
| Place dependence | | (PLD) |
| Mediator | I enjoy various activities in the market square than in any other areas in the neighborhood | PLD1 |
| | I get more satisfaction in visiting market square more than in any other areas in the neighborhood | PLD2 |
| | Activities in the market square are more important than activities in any other areas in the neighborhood | PLD3 |
| | I would not substitute any place for the type of activities I do have in the market square | PLD4 |
| Place familiarity | | (PLF) |
| Independent | I am quite familiar with the market square | PLF1 |
| | I know the market square like the back of my hand | PLF2 |
| | I have many memories of visiting the market square | PLF3 |
| | I recognize most of the market square surrounding and interiors areas | PLF4 |
| Open Space Utilization | | (OSU) |
| Dependent | The market square is important for economic-related activities | OSU1 |
| | The market square is important for social-related activities | OSU2 |
| | The market square is important for religious-related activities | OSU3 |
| | The market square is important for cultural heritage-related activities | OSU4 |

*3.3. Normality*

Skewness and kurtosis z-esteem anticipated range of skewness and kurtosis ought to be ±1.96. Then again, the Shapiro-Wilk test p-value was supposed to be above 0.05, a visual assessment performed was Histogram, Normal Q-Q plots, and box plots all justified accepted moderately normal data distributed. Even though, data not expected to be entirely normal, yet accomplished 80% of the skewness z-values are above ±1.96 which is adequate for additional analysis (Hair et al., 2012; Sheridan et al., 2006). As shown in Figure 4 histogram and probability plots affirmed that normality assumptions were not disregarded and decently appropriate for this examination since all bars on the histogram were closed to a normal curve (Sheridan et al., 2006; Solomon et al., 2013).

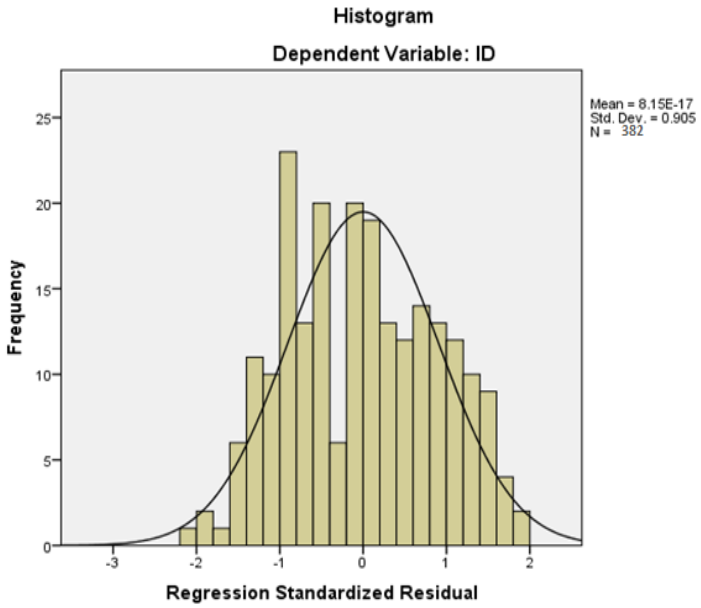


Figure 4: Histogram and probability plotsconfirmed that normality assumptions
Source: Sheridan*et al*., 2006; Solomon *et al.*, 2013.

*3.4 Internal Reliability and validity of measurements*

Internal consistency reliability signifies the degree to which all items on a specific (sub) scale are measuring a similar model. Cronbach alpha coefficient and composite reliability are generally adopted estimation of the internal consistency reliability of an instrument in study accordingly. A threshold of 0.7 was utilized as the cut-off point for a latent construct to be viewed as reliable. Table 2 presents Cronbach alpha coefficients for the latent constructs. It portrays that P-identity is 0.763; P-dependence is 0.855; P-familiarity is 0.815, and Open space usage is 0.832). These outcomes affirmed satisfactory internal consistency and reliability scores of the measures adopted in the research.

Table 2.Cronbach alpha coefficients for the latent constructs

| Observed Variables | Loadings | Cronbach alpha coefficients for the latent constructs (α >0.7) |
|---|---|---|
| Place identity (P-Identity) | | 0.763 |
| PID1 | 0.829 | |
| PID2 | 0.737 | |
| PID3 | 0.840 | |
| PID4 | 0.850 | |
| Place dependence (P-Dependence | | 0.855 |
| PLD1 | 0.685 | |
| PLD2 | 0.756 | |
| PLD3 | 0.792 | |
| PLD4 | 0.608 | |
| Place familiarity (P-Familiarity) | | 0.815 |
| PLF1 | 0.664 | |
| PLF2 | 0.818 | |
| PLF3 | 0.802 | |
| PLF4 | 0.752 | |
| Open space usage (Open Utilisation) | | 0.832 |
| OSP-1 | 0.779 | |
| OSP-2 | 0.850 | |
| OSP-3 | 0.837 | |
| OSP-4 | 0.788 | |

Even though Cronbach alpha coefficients for the latent constructs report affirmed that the internal consistency reliability in Table 2; nonetheless, for some situations, Cronbach's alfa accomplished doesn't suggest that the instruments are reliable and could justify suitable prediction (Hair et al., 2012). Consequently, Table 3 uncovered Composite reliability (CR) of the latent constructs asanalyzed through SEM which accomplished 0.7 thresholds.

Table 3: Composite reliability coefficients for the latent constructs

| Items | Composite Reliability coefficients for the latent constructs(CR>0.7) |
|---|---|
| Place identity (PLD1-PLD4) | 0.850 |
| Place dependence (PID1-PLD4) | 0.898 |
| Place familiarity (PLF1-PLF4) | 0.877 |
| Open space usage (OSP-1- OSP-4) | 0.888 |

### *3.5 Convergent Validity (CR) and Average Variance Extracted (AVE)*

Convergent validity was initiated and justified by Average Variance Extracted (AVE) from each latent construct, as suggested by Hair et al., (2012). Likewise, to achieve satisfactory convergent validity, it is suggested that the AVE of each latent construct ought to be >.50 at least. In this research, the AVE values detailed in Table 4, theconvergent validity of the latent constructs in this investigation. To set up the discriminant validity, it is important to introduce a proper AVE (Average Variance Extracted) examination. Hence, in the AVE examination, there is a need to test and observe if the square root of each AVE value having a place with each latent construct is more prominent than any correlations among any pair of latent constructs. AVE measures clarified the variance of the constructs. When comparing AVE and the correlations coefficient, the researcher needed to check whether the items of the construct clarify more variance than items of different constructs. As a dependable guideline, the square root of the AVE of each construct ought to be larger than the correlation of the particular construct with any of the other constructs. Thus, the value of the AVE for each construct ought to be not less than 0.50 (Fornell and Larcker, 1981).

Table 4: Convergent Validity coefficients for the latent constructs

| Items | Convergent Validity coefficients for the latent constructs (AVE>0.5) |
|---|---|
| Place identity (PLD1-PLD4) | 0.593 |
| Place dependence (PID1-PLD4) | 0.689 |
| Place familiarity (PLF1-PLF4) | 0.641 |
| Open space usage (OSP-1- OSP-4) | 0.665 |

### *3.6. Discriminant Validity*

Discriminant validity is the degree to which a specific latent construct is not the same as another latent construct. In this current research, discriminant validity was affirmed utilizing the AVE. This was cultivated by coordinating the correlations among the latent construct with square roots of the average variance extracted. Subsequently, the square root of all the average variance extracted surpassed the correlations among latent constructs, meaning satisfactory discriminant validity showed in Table 5 demonstrated discriminant validity reports of this exploration.

Table 5: Discriminant validity reports

| Latent Variables | OSU | PLD | PID | PLF |
|---|---|---|---|---|
| OSU | *0.742* | | | |
| PLD | 0.480 | *0.741* | | |
| PID | 0.463 | 0.567 | *0.709* | |
| PLF | 0.192 | 0.216 | 0.247 | *0.708* |
| Note: bold values face represents the square root of the average variance extracted. | | | | |

Discriminate validity can be set up connecting the indicator loadings with the cross-loaded factors. To accomplish abundant discriminant validity, it is frequently suggested that all indicator loadings ought to be more prominent than the cross-loading. Notwithstanding, cross-loading in Table 6demonstrated that all factors loadings indicators that were

more prominent than the cross-loading, indicating a satisfactory discriminant validity for subsequent examination. This portrayed cross-loading factors, justified all held measures accomplished the minimum needed for Structural Equation Modelling for this examination.

Table 6: Cross loading factors

| | PID | OSU | PLD | PLF |
|---|---|---|---|---|
| PID1 | **.829** | .271 | .283 | .511 |
| PID4 | **.850** | .388 | .334 | .497 |
| PID3 | **.840** | .289 | .315 | .480 |
| PID2 | **.737** | .152 | .117 | .389 |
| OSU1 | .318 | **.779** | .274 | .375 |
| OSU2 | .224 | **.850** | .286 | .362 |
| OSU4 | .234 | **.788** | .352 | .408 |
| OSU3 | .352 | **.837** | .351 | .383 |
| PLD1 | .132 | .212 | **.685** | .164 |
| PLD2 | .302 | .271 | **.756** | .237 |
| PLD4 | .229 | .220 | **.608** | .371 |
| PLD3 | .285 | .293 | **.792** | .346 |
| PLF4 | .465 | .295 | .393 | **.752** |
| PLF 2 | .555 | .353 | .257 | **.818** |
| PLF 3 | .525 | .352 | .235 | **.802** |
| PLF1 | .136 | .318 | .233 | **.664** |

## IV. RESULT AND DISCUSSION

### *4.1 Respondents' demographic qualities*

The results from the survey conducted accomplished an 82.8 % response rate bringing about a total of 382 completed surveys with 163 (42%) respondents from the Ijebu-jesa neighborhood, 116 (26%) respondents from Iloko area, and 103 (respondents were from Ijeda area. Other details of the demographic qualities of the respondents are shown in Table 7.

Table 7: Socio-demographic characteristics for respondents

| Characteristics | Percentages (%) | Characteristics | Percentages (%) |
|---|---|---|---|
| Age groups | | Education | |
| 12 – 18 years | 18.10 | No education | 38.20 |
| 19 – 29 years | 33.20 | Higher school | 41.40 |
| 30 – 59 years | 27.50 | Bachelor/1st degree | 17.00 |
| 60 years and above | 21.20 | A postgraduate degree and above | 3.40 |
| Mean | 3.14 | Mean | 1.86 |
| Standard deviation (SD) | 1.83 | Standard deviation (SD) | 0.82 |
| Gender | | Religion | |
| Male | 49.00 | Christianity | 36.10 |
| Female | 51.00 | Islam | 45.50 |
| Mean | 1.30 | Traditional | 18.30 |
| Standard deviation (SD) | 0.50 | Frequency of utilization | |
| Neighborhood affiliation | | Very often | 73.00 |
| Ijebu-jesa | 42.67 | Often | 22.30 |
| Iloko | 30.36 | Sometimes | 3.10 |
| Ijeda | 26.96 | Rarely | 1.60 |
| Mean | 1.70 | Mean | 1.30 |
| Standard deviation (SD) | 0.73 | Standard deviation (SD) | 0.61 |

### *4.2 Research Objective 1: Structural equation modeling (General relationship among the variables)*

In accomplishing the research Objective 1, this investigation presents the research model as presented inFigure 5. Hence, the exploration adopted multiple regression connections between the variables of PLD, PID, PLF, and OSU among the 382 respondents across the three contextual investigation areas. Note that place dependence connotes (P-Dependence), place identity (P-Identity), and place familiarity (P-

Familiarity) situated as the independent variables, while, Open space usage (Open-S/Utilization) showed as the dependent variables for this examination.

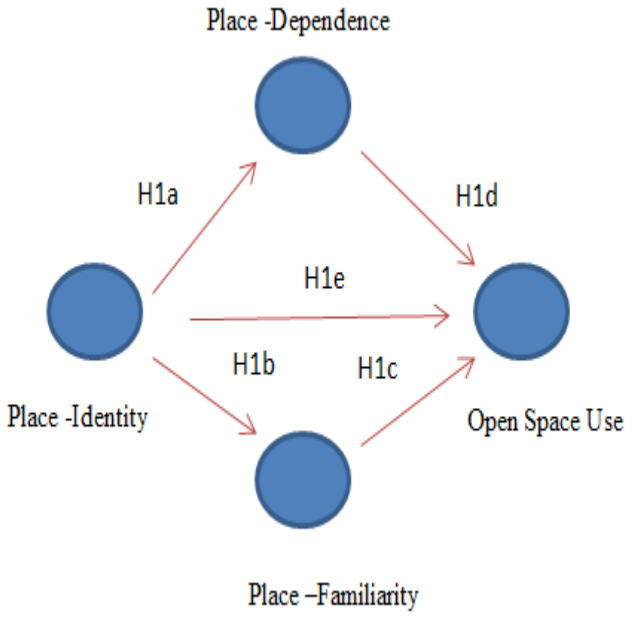


Figure 5: Hypothetical dimension for each of the three case study areas

The overall neighbourhood SEM algorithm showed that the PID path towards PLD is significant (β= 0.633, p<0.000), while, PLF (β= 0.794, p<0.000) on PID is likewise significant. Additionally, PLF (β= 0.680, p<0.000), and PLD (β= 1.667, p<0.000) significant on the OSU individually. Finally, PLD (β= 0.590, p<0.000) remains significant on OSU. In conclusion, the main hypothesis (H1) and any remaining 5 sub-hypothesizes (H1a, H1b, H1c, H1d, H1e) are upheld in this investigation.

*4.3 Research Objective 2: Mediation report of PLD in the model construct of Ijebu-jesa neighborhood market*

Research Objective 2, in this research, determined the mediating role of place-dependence (PLD) between the construct of place identity (PID) and markets' usage (OSU) in the Ijebu-jesaneighborhood. A mediator is an intervening variable that is influenced by an independent variable (s) and thus influences the dependent variables (Kline, 1998). The hypothetical measurement where the place dependence (P-Dependence) represents a mediator between place identity (PLD) and open space use (OSU) at Ijebu-jesa market as shown in Figure 6.

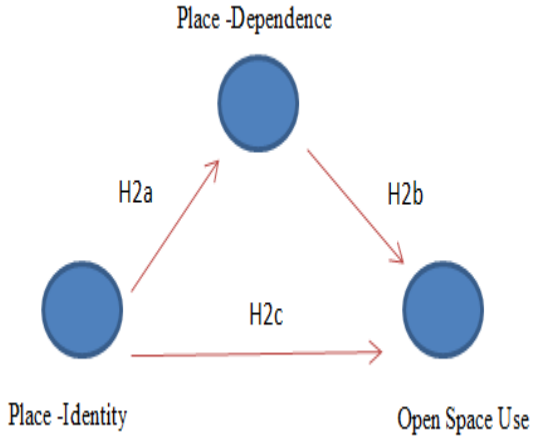


Figure 6: Hypothesized IjebuJesa mediation effect model

Further embraced properties of bootstrapping fused in the SEM programming are to justify the relationship among the constructs (PID and PLD) with regards to respondents in Ijebujesa market towards OSU. The Ijebujesa algorithm showed that PID path towards PLD upheld (β= 0.633, p<0.000), PLD (β= 0.863, p<0.000), and PLD (β= 0.590, p<0.000) significant on the OSU respectively. This examination viewed a sum of 83 percent variance ($R^2$) clarify of open space usage with regards to Ijebujesa municipality market. The mediation impacts likewise advocated partial mediation as the indirect and direct impact upheld on OSU. This inferred that PLD mediate PID towards OSU in the locale of Ijebujesa market in this investigation, consequently hypothesis (H1) is subsequently upheld. Also, hypothesis H2a, H2b, and H2c are similarly upheld.

Further adopted properties of bootstrapping incorporated in the SEM software to justify the relationship among the constructs (PID and PLD) in the context of respondents in Ijebujesa market towards OSU. TheIjebujesa algorithm indicated that PID path towards PLD supported (β= 0.633, p<0.000), PLD (β= 0.863, p<0.000) and PLD (β= 0.590, p<0.000) significant on the OSU respectively' Also, this study observed a total of 83 percent variance ($R^2$) explain of open space utilization in the context of Ijebujesa Township market. The mediation effects also justified partial mediation as the indirect and direct effect supported on OSU. This implied that PLD mediate PID towards OSU in the region of Ijebujesa market in this study, hence hypothesis (H1) is thus supported. Similarly, hypotheses H2a, H2b, and H2c are equally supported.

*4.4. Research Objective 3: Mediation report of PLD in the model construct of Iloko-Ijesa neighbourhood market*

The research objective 3, in this investigation, examined the mediating significance of place dependence (PLD) between the construct of place identity (PID) and markets' usage (OSU) in Iloko area. Figure 7 showed the mediation effect of

PLD in the construct. The constructs (PID and PLD) with regards to respondents in Iloko area market towards OSU.

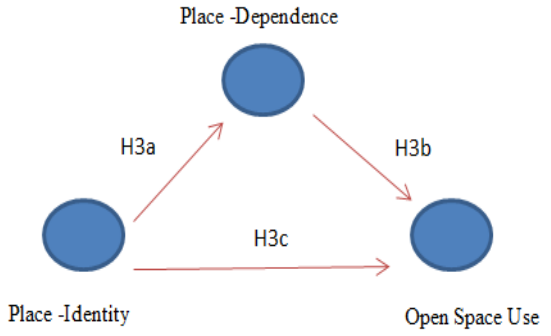


Figure 7: Iloko mediation effect model

Essentially, actualized properties of bootstrapping fused in SEM to justify the relationship among the constructs (PID and PLD) towards OSU in Iloko locale. The mediation model algorithm showed that PID in the relationship with PLD proposed (β= 0.739, p < 0.000), PLD (β= 1.089, p<0.000), and PLD (β= 0.403, p<0.000significant on the OSU separately. Moreover, this examination noticed an all-out gather of 80% variance (R2) clarify of open space use regarding Iloko municipality market. The mediation effects justified partial mediation since the indirect and direct impact upheld on OSU. This inferred that PLD somewhat mediates PID towards OSU in Iloko market square in this investigation, subsequently, hypothesis (H3) is consequently upheld. Likewise, theories H3a, H3b, and H3c are similarly supported.

*4.5. Research Objective 4: Mediation report of PLD in the model construct of Ijedaneighbourhood market*

Research Objective 4 in this investigationuncover the mediating impact of place-dependence (PLD) between the construct of place identity (PID) and markets' use (OSU) at Ijeda area. Figure 8 delineated the mediation impact of PLD in the construct. Accordingly, the constructs (PID and PLD) with regards to respondents in Ijeda district towards OSU were introduced.

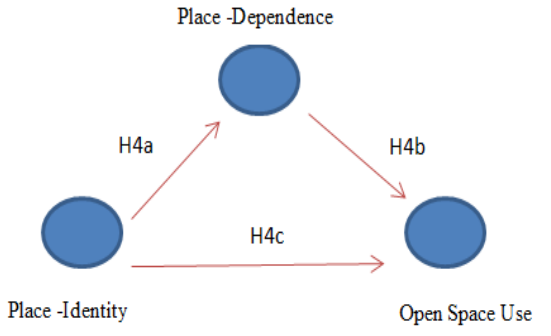


Figure 8: Ijeda mediation effect model

Appropriately, the properties of bootstrapping embedded in SEM embraced all together justify the interrelationship among the constructs (PID and PLD) towards OSU in the Ijeda locale. The mediation impact model algorithm showed that PID in the relationship with PLD recommended (β= 0.716, p < 0.000). Moreover, PLD (β= 0.933, p<0.000) significant on the OSU. A sum of 87 percent differences ($R^2$) clarifies of open space usage observed regarding Ijeda district. The mediation impacts justified partial mediation since the indirect and direct impact upheld on OSU. This inferred that PLD somewhat intercedes PID towards OSU in Ijeda market square in this examination, subsequently, hypothesis (H4) is consequently upheld. Essentially, theories H4a, H4b, and H4c are similarly upheld.

## V. FINDINGS

In cognizance of individuals and place study, this exploration genuinely documented the importance of the market's familiarity (PLF), a market dependence (PID), market dependence (PLD), and the use of the market square (OSU) for this study markets' context in South-west, Nigeria. Definitively, users' dependence on the market (PLD) indicates a partial mediator on the construct of the relationship of users' identity (PID) towards the utilization of market-square (OSU) in the three areas (Ijebujesa, Iloko, and Ijeda).

All the variance clarified in every district over 80% Square correlation ($R^2$) which justified good prediction of every locale of this research. In comparison, this investigation considered Ijeda area Structural Equation Model as generally appropriate as $R^2$ detailed 87 percent, trailed by IjebuJesa 83 percent $R^2$ and Iloko revealed 80% $R^2$ in this examination. Place dependence is a unifying affiliation made among people and the place. This research widens readers' understanding through proper documentation of people groups' dependence and sustainability of the market place. The result agreed with the past investigation of Pretty et al., (2003) in which the researcher insisted on the connections among place and users' reliance towards social arrangements and social activities.

The significant parts of place dependence include the fulfilment of the users at the current area of the commercial center as far as social and quality conditions are concerned; when contrasted with other alternative zones. Likewise, place dependence involves items showing the residents' reluctance to utilize another site for their specific exercises (Kyle et al., 2004). Place dependence by inhabitants is detectable to the tribal ties and consequently sets off the individuals who want to stay at a particular place for quite a while (Hay, 1998). Residents' dependence on the marketplace was normally transformed because of their adaptations, independent of any difficulties being defied. A strong bond exists which hamper the movement of the clients to elsewhere unthinkable. The dependence is additionally credited to showcase as a legacy from their progenitors. Consequently, it cemented their plan and perpetual longings to remain in the area.

## VI. CONCLUSION, RECOMMENDATION, AND FUTURE RESEARCH

The focus of this research work was to investigate the relationship between the place dependence and public spaces' utilization in Nigeria. The result of this study's discoveries harped on the centrality of making attractive public space's sustainability, and visitors' satisfaction. The nature of public spaces has been pronounced as an authentic instrument that helps in advancing the social nature of human existence and network sustainability. In the interim, the public space sustainability in this setting is unravelled in two classifications, social and economic sustainability. Social sustainability context varies as a result of shifting occupants' social qualities and culture (Dinnie, Brown, & Morris, 2013; Karuppannan and Sivam, 2015). Then again, the economic sustainability pointed toward accomplishing the greatest productivity without trading off the normal capital, associating with the local, territorial, and national network legacy.

Thus, it becomes imperative to inform all stakeholders with adequate comprehension of the connection between neighborhood design and social sustainability in developing nations. This will upgrade the formation of socially sustainableneighborhoods. Subsequently, considerable endeavors ought to be dissipated towards proper public space preservation and sustainability of communities in an attempt to improve residents' connection and use drives. Experts, for example, city organizers, architects, scene engineers, scientists, sociologists among others have a task to carry out in future design and planning of public space. In a similar vein, the rethinking of public space ought to be receptive to inhabitants' different socio-cultural necessities if community sustainability is to be accomplished. In the light of this, research recommendation has it that a reasonable distribution and establishment of public spaces in the country is to be enhanced. Prominently, there is an urgent need towards encompassing a more mind-boggling approach towards the design and planning of public spaces. The implications of the study's' discoveries are vested on stakeholders' preservation at both the local, state, and national arms of government.The future study relied on the investigation of the mediating impacts of different variables, for example, place identity, place familiarity, and the use of open space at the three case study markets.

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