Original Research Article

ASSESSMENT OF BUIDLING COLLAPSE IMPACT ON SOCIO ECONOMIC DEVELOPMENT IN PORT HARCOURT METRPOLIS OF RIVERS STATE.

Abstract: The rate of building disillusionment in Nigeria especially Port Harcourt Metropolis is to a great degree aggravating and has achieved the loss of lives and properties; in this manner much cash related endeavors are wasted. Each developed structure is depended upon to satisfy the helpful goals of prosperity, serviceability and economy. It is against this setting the examination sets out to recognize the inescapable segments responsible for building breakdown and besides takes a gander at the level of effect connected by the components, remembering the ultimate objective to detail basic steps of constraining them, if not, completely murder events of building breakdown in the state. The examination is coordinated through basic and discretionary data. The basic data was delivered utilizing composed surveys figured out how to the accomplices in the developed state of Port Harcourt Metropolis. Inferential bits of knowledge, for instance, Cronbach's alpha and t-test were used for the examination. The result revealed five fundamental segments that yield honest to goodness and critical thought in making frameworks for overcoming breakdown or disillusionment of made establishments in the state. The factors are: Non-approval of building controls, inadequate learning of advancement materials, Lack of on area get ready, insufficient resources and Construction issues. As per the Millennium/Sustainable Development Goals (MDG/SDG), this examination fills in as a fundamental gadget for approach makers to ensure that development standard is passed into law in Port Harcourt Metropolis of Rivers state and past.

Keywords: *Building and Sustainable Development Goals*

1. INTRODUCTION

Occurrences of building breakdown in Nigeria are posturing genuine difficulties to every one of the partners in the building business/building experts, Governments, Developers, Landlords and Users. Run of the mill cases of fallen structures incorporate crumple of Multi-Story Building in Mokola, Ibadan, Oyo State (1974), working under development at Benjamin Opara Street, Port Harcourt, Rivers State, (2006) and numerous others. (Olagunji et al, 2013). On the Night of November, 2012, an uncompleted 3 storey building crumpled in a water logged zone of Owerri amid an overwhelming deluge. Low quality Cement was utilized, and fabricating was being administered by a non-scientific expert. On May, fifteenth, a 4 storey working under development fell in Agbama Estate in Umuahia executing undisclosed number of squatters under the floors. Examination uncovered that building directions allow a most extreme of 2 stories in the region. On fifth September, 2013, a 4 storey working under development, fell at 24 Obanye Street in Onitsha, amid a storm. (Source. Global Journal of Civil Engineering, Vol.3, No.4, pp.41-49, October 2015).

Structures that meet craved execution necessities enhance the national resource stock and improve its Gross Domestic Product. Such structures are supportable since they address the

issues of the present while additionally adding to future needs, (Olagunji et al, 2013). There is just a single contrasting option to maintainability; unsustainability which failing to meet expectations of structures forecast to Nigeria's economy. A few gainful lives and properties have been lost in the different occurrences of building breakdown in Nigeria, and these misfortunes, which would just really be felt by who and what is to come, have adversely affected the financial status of its subjects. This work inspects the contemporary issues in building breakdown and their suggestions for supportable development industry advancement in Nigeria. To do this, the investigation right off the bat evaluates the state and seriousness of building breakdown in Nigeria. Besides, it surveys the standards of maintainable improvement in the constructed condition. Thirdly, it investigates whether the way to deal with development by industry partners take after the standards of reasonable advancement (Do partners consider the future in their present exercises). At long last, it proposes how the development business through advancement and supportable practices can upgrade manageable improvement, development and strength of structures.

Most Nigerians were met with the truth of fallen structures as of late as a few structures, for example, the working under development at Benjamin Opara Street, Port Harcourt, Rivers State, (2006), a 3 storey building crumpled in a water logged zone of Owerri amid an overwhelming deluge, a 4 storey working under development fell in the Agbama Estate in Umuahia and other individual structures crumpled with no antagonistic events, for example, quake, tidal wave, and so on and River State is not in exemption.

The inquiry that quickly rings a bell is whether the structures being referred to were appropriately allowed to be worked in a type of endorsed Building Permit? What's more, would they say they were allowed as per the National Building Regulation? Did the Developers go along entirely with the endorsed Building Permit amid the development?

The Nigerian Institution of Surveyors in a press proclamation amid Umuahia Disaster expressed: "what we find and all the time was the situation is that, you see an establishment began, which in our expert perspective is for a solitary storey building or most extreme a 2-storey building. With time, the ground floor is finished; they may sit tight for some time and include another floor, at that point one more and again… " (Nigeria Institution of Surveyors, 2013).

The NIS proclamation means that, either engineers create without an endorsed fabricating plan (Building Permit) or they don't agree to whatever has been affirmed in a type of building grant for them. As per Parker (2000), "However there is minimal hard confirmation, a developing assemblage of accounts and concentrates from OECD nations proposes that lacking consistence underlies numerous such disappointments. This is a typical however minimal comprehended type of administrative disappointment". Vandapuije (2012) considered engineers' state of mind of changing over each space accessible including toilets into room for rentals, along these lines adjusting endorsed structures as outlined as dishonorable and must be halted quickly. A few Researchers, for example, Awu (2012) has as of now looked into the securing of building grant in Nigeria and its different difficulties, the Assembly's ability to vet allows before endorsement and so on. The viewpoint that has not been basically considered and which the specialist was keen on was the manner by which entirely the engineers follow their affirmed Building Permit keeping in mind the end goal to guarantee sound working as outlined. A

building must be sound and safe if the plan affirmed by the specialists is entirely gone along amid the development.

In any case, the expanding rate of events of building breakdown calls for a genuine concern. It is in this manner on the preface of this that the accompanying inquiries end up noticeably essential.

The objectives of this study are the following:

- To distinguish the significant reasons for building breakdown in River State
- To assess its impact on wage/business and way of life of the general population of River state.
- To discover the level of consistence with building direction
- To propose answers for handling the issue

2. DESCRIPTION OF LOCATION

Study range for this exploration is Porthacourt Metropolis in Rivers State Nigeria. Porthacourt Metropolis is comprised of two neighborhood governments Areas to be specific; Porthacourt L.G.A and Obio/Akpo L.GA. Port Harcourt L.G.A is prevalently known as PHALGA. PHALGA was made in1912. Its populace estimate is 541,115. PortHarcourt is comprised of twenty (20) wards with add up to zone scope of 5856.5kmand facilitate 4.4927N. Obio/Akpor was made in 1989 with headquarter in Rumuodumaya, It has a populace of 464, 789 with an aggregate region scope of 20107.8km2. It is comprised of 17 wards. The weights of expanding urbanization and environmental change joined with projections of noteworthy increments in beach front populace on PortHarcourt city require an all-encompassing way to deal with checking the issue of building disappointment or crumple. Below is the guide of River state with the investigation range highlighted.

FIG. 1 Map of River State

Natural assets-. The state is renowned for its tremendous stores of raw petroleum and flammable gas. It was maybe the wealthiest and most essential segment of the African zone of the British Empire. Streams State has two noteworthy oil refineries, two noteworthy seaports, air terminals, and different modern homes spread over the land. Over 60% of the nation's yield of unrefined petroleum is created in the state. Other normal assets found inside its limits are silica sand, glass sand and mud. The zone of concentrate in this activity is the Greater Port Harcourt city in streams territory of Nigeria which emerges as a redefinition of the ground breaking strategy of the garden city of Nigeria. It is controlled through an authoritative board known as GPHDA. More prominent Port Harcourt city advancement expert is built up by law in 2009 with an order to encourage the usage of the more prominent Port Harcourt all-inclusive strategy and manufacture the new city. The vision of the expert is to change the more prominent Port Harcourt territory into a world class city, globally perceived for perfection, and the favored goal for financial specialists and visitor. The goal is to construct a very much arranged city, through the execution and authorization of strategies that will guarantee the arrangement of top notch framework and conveyance of value administrations to improve the way of life and prosperity of the general population. The overseeing is body is comprised of: (1) low maintenance executive (2) Administrator (3) Six other qualified experts – from domain administration, arrive looking

over, designing, urban arranging, amount studying, building, law and engineering (4) Representatives of service of equity, arrive/overview, urban advancement, works and condition. (5) Two people speaking to the NGO's and different partners. Extraordinary port Harcourt covers a region of 1,900km2 (40,000 hectare of land spreading over crosswise over 8 nearby governments crosswise over with an anticipated populace of 2 million individuals. The city which constitutes the central territory of study will be an expansion of the old port Harcourt city with the goal to consider urban development through vital arranging and decongesting (de-densification) of the old city. While bit by bit incorporating both urban communities as a solitary unit. Fused in the arrangement likewise is to manufacture a direct city with 24hrs power supply, system of reticulated water supply, system of good streets/lanes, open transportation framework, storm water administration, squander transfer frameworks, observation framework, well laid out private business and modern zones, parks, gardens, and so forth.

The table underneath highlights the properties of the 7-neighborhood government region that make up the city

TABLE 1 Profile of Greater P. H.

S/ No	LGA	Coordinates	Date Created	Land mass	Capital	Population	Population ratio (M/F)	Density inh/KM^S	wa rds
1.	Elem e	5^{o}04’60’ N 6^{0}38’59E	1996	138	Ogale	190,884	51.7%/48.3 %	1,6336.6	10
2.	Etche	4.9908^{0}N 7.0134E		809	Okehi	249,454	51.2%/48.2 %	368	19
3.	Ikwer re	4.58’N 6.53E	1991	260	isiokp o	189,726	51.6%/48.4 %	341.9	13
4.	Obio/ Akpo r	4.7422N 7.0837E	3/05/19 89	260	Rumuo dumay a	464,789	51.7%/48.3 %	20107.8	17
5.	Ogu-Bolo	4.6694N 7.20268E	1998	89	Ogu	74,683	51.2%/48.8 %	1002.6	12
6.	Oyigb o	4.8735N 7.1237E	1991	248	Afam	122,687	51.7%/48.3 %	599	10
7.	PHC	4.4927N 7.21E	1912	109	Phc	541,115	52.1%/47.9 %	5856.5	20

Source: NPC, 2006

3 MATERIALS AND METHODS

Population and Sample-. With the end goal of this examination, the specialist chooses to test information from the distinctive associations that has something to state despite building breakdown In Porthacourt Metropolis. The building professional data was sampled from professionals such as, Architects, Electrical engineer, Mechanical engineers, Civil engineers and Quantity Surveying. For Medical industry, information was tested from Nigeria Medical Association and Hospital. What's more, for the military, information was sourced from the Nigerian Army, Nigerian Navy, and Nigerian Air compel. For the Para military, information was sourced from Nigerian Police Force, Nigerian Civil Defense Corp, Fire benefit commission. For Business organization, information was examined from Commercial Banks, insurance agencies and Mortgage Banks. For Non-administrative organization data was obtained from the Red Cross

and the World Health Organization and UNICEF. Information for Civil Society was additionally inspected from Tenants, Landlord and wards. This makes our objective populace bunch limited. Concurring the 2006 National Census figure, Port Harcourt city with two (2) Local Government crosswise over has an anticipated populace of 1 million individuals. In any case, we should not consider that substantial populace estimate, and will just concentrate on those that are included of influence by building disappointment. The information gathering instrument utilized was poll.

Sampling techniques-. Testing system gives a scope of strategies that empowers you to diminish the measure of information you have to gather by considering just information from a sub gathering (known as a specimen), as opposed to all conceivable cases or components (Saunders et al, 2007). The motivation behind taking an example is to acquire an outcome that is illustrative of the entire populace being tested without heading off to the inconvenience of asking everybody. Having distinguished the objective gatherings for the viable direct research, three hundred respondents containing fifty (50) Building Professionals, fifty (50) Medical Professionals, fifty (50)Military, fifty (50) Paramilitary, fifty (50) Business Institutions, fifty (50) NGO's and fifty(50) Civil Society were arbitrarily chosen utilizing stratified arbitrary testing strategy as a sort of likelihood examining. The outline was picked on the grounds that it empowers the specialist to gather information without control of any variable(s) of enthusiasm for the investigation. The plan likewise gives chance to rise to possibility of investment in the investigation for respondents. This method was utilized because of its favorable circumstances. It is easy to use by non-mathematicians and exceptionally illustrative if all respondents take an interest in the information gathering. It is quick on the grounds that no numerical estimations are included and furthermore enables the scientist to consider financial issues that influence information accumulation and making of inferences. Respondents were stratified into different groupings with the end goal that information gathered will be illustrative for all partners. The detail of the stratification is appeared in section four.

Surveys-. Three hundred (300) surveys were administered to the above recorded partners in building industry of the Portha court city. Out of the 300 polls that were conveyed, 274 were returned. Out of the sum returned, 8 were inadequate and 22 were clear showing that the individual may have chosen not to take an interest while 244 were completely finished. The attributes of the 244 members are as point by point expressed in part four.

Types and sources of data-. Both essential and auxiliary information were utilized as a part of accomplishing this examination. Auxiliary information was acquired through different diaries, distributions, books and other pertinent writing. These diaries and as of now existing literary works gave important bits of knowledge into the classes of Critical elements that cause building disappointment that were additionally subjected to trial of speculations. Also, specialists in the building business were reached to guarantee exact information. The essential information was produced from controlling a well-structure and institutionalized poll on the elements that can add to building disappointment.

Techniques of data analysis-. Tsun et.al (2008) characterized information examination as those systems with which the examiner separates from the information, data that was not obviously there earlier and which would empower a rundown depiction of the subject concentrated to be made. The information for this venture is created from essential and optional source. The essential wellsprings of information for this examination work comprise of oral meetings and

utilization of survey. The auxiliary information was gotten from widely inspecting related writing, books and diaries.

In this examination, the instruments of information investigation utilized include:

1) Cronbach Alpha (α)

This is a champion among the most surely understood psychometric tests used to survey the inside consistency of the things in the scale or instrument, i.e., how responses to things in the scale or instrument relate to each other. According to Tavakol and Dennick (2011), Alpha was delivered by Lee Cronbach in 1951 to give a measure of inside consistency of a test or scale; it is conveyed as a number in the region of 0 and 1. Internal consistency delineates how much all things in a test measure a comparable thought or construct and subsequently it is related with the interrelatedness of the things inside the test. Inside consistency should be settled before a test can be used for research or examination purposes to ensure authenticity. Additionally, steadfast quality examinations show the measure of estimation screw up in a test. Put basically, this comprehension of relentless quality is essentially the association of test. Squaring this relationship and subtraction from 1.00 produces the document of estimation botch. For example if a test has a steady nature of 0.80, there is 0.36 botch contrast (sporadic slip-up) in the scores (0.80 x 0.80 = 0.64; 1.00 - 0.64 = 0.36). As the gage of trustworthiness manufactures, the piece of a test score that is inferable from goof will reduce. It is of note that the resolute nature of a test reveals the effect estimation botch on the watched score of an understudy partner rather than on an individual understudy. In case the things in a test are related to each other, the estimation of alpha is extended. Regardless, a high coefficient alpha does not by and large mean an abnormal state of inside consistency. This is by virtue of alpha is impacted by the length of the test. In case the test length is too short, the estimation of alpha is reduced. In like manner, to extend alpha, more related things testing a comparative thought should be added to the test. Note that alpha is a property of the scores on a test from a specific case of respondents. As needs be analysts should not rely upon appropriated alpha gages and ought to measure alpha each time the test is overseen. As pointed out some time recently, the amount of test things, thing interrelatedness and dimensionality impact the estimation of alpha. There are different reports about the sufficient estimation of alpha, stretching out from 0.70 to 0.95. A low estimation of alpha could be a result of a low number of request, poop interrelatedness between things or heterogeneous create. Cronbach alpha (α) can be figured using condition 1 underneath as outlined out by Ritter (2010).

$$\alpha = \frac{n}{n-1}\left[1 - \left(\frac{\Sigma\, \delta_n^2}{\delta_{total}^2}\right)\right] \qquad (1)$$

Where: n is the number of items; $\Sigma\, \delta_n^2$ is the sum of the n item score variance; and δ_{total}^2 is the variance of scores on the total measurement. The sum of nth item scores variance is evaluated as shown in equation 2, below and the total variance can be computed using Eq. 3.

$$\Sigma\, \delta_n^2 = \delta_1^2 + \delta_2^2 + \delta_3^2 + \cdots + \delta_n^2 \qquad (2)$$

$$\delta_{total}^2 = \Sigma\, \delta_n^2 + \left[\sum COV_{ij}\ (for\ i < j) x\ 2\right] \qquad (3)$$

COV_{ij} is obtained from the variance /covariance matrix.

Descriptive Analysis-. Expressive investigation otherwise called distinct insights are utilized to portray the essential elements of the information in an examination. They give straightforward rundowns about the example and the measures. Together with basic designs examination, they frame the premise of essentially every quantitative investigation of information.

Distinct measurements are normally recognized from inferential insights. With graphic insights you are essentially portraying what is or what the information appears. With inferential measurements, you are attempting to achieve conclusions that reach out past the prompt information alone. We utilize illustrative insights just to depict what's happening in our information. Illustrative Statistics are utilized to display quantitative depictions in a sensible frame. In an exploration think about we may have bunches of measures. Or, on the other hand we may gauge an extensive number of individuals on any measure. Graphic measurements help us to streamline a lot of information sensibly. Each clear measurement decreases loads of information into a less complex outline. In our examination, Descriptive investigation is utilized to break down the statistic information gathered from respondents. The sort of distinct insights utilized as a part of this work is the mean score and the straightforward rate.

The basic rate-. Basic rate depends on the aggregate number of uniform reactions of each scale instrument partitioned by the aggregate number of uniform reactions of each scale appraisal isolated by the aggregate number of reactions increase by 100.

$$E/_N \ X \ 100$$

Where: $E = Uniform\ responses$ and $N = Total\ number\ of\ respondents$

The mean ranking model is given as: $\bar{Y} = \frac{\Sigma f y}{\Sigma y}$ where f is the number of observation or frequencies

The One Sample t-Test-. The one sample t-test model is given

$$T_{cal} = \frac{\bar{y} - \mu_0}{s/\sqrt{n}}$$

Where $\bar{y}$ is the hypothesized mean

$\mu =$ The mean expected under the null hypothesis

$s =$ Sample standard deviation

$n =$ Sample size

Decision Rule: Reject the null hypotheses if the t-sig is less than

0.05, otherwise we uphold the null hypothesis.

Level of Significant: $\alpha = .05$.

Note: that the analysis of the data obtained will be done using the Statistical Package for Social Sciences (SPSS version 21).

4 RESULTS AND DISCUSSION

4.1.1 Reliability Test

4.1.2 SPSS STATISTICS OUTPUT FOR CRONBACH'S ALPHA

SPSS Statistics produces a wide range of tables. The main essential table is the Reliability Statistics table that gives the genuine incentive to Cronbach's alpha; the measures of Cronbach's alpha were ascertained inside the satisfactory range for unwavering quality as appeared in Table 2

TABLE 2 Reliability Statistics

Cronbach's Alpha	No of Items
.763	29

Source: Researcher's field data, 2017

From Table 2 of reliability statistics above, we can see that Cronbach's alpha is approximately .76, which indicates a high level of internal consistency for our scale. This value also indicates that there is 0.24 error variance (random error) in the scores. The alpha reliability provided the statistical support for the responses of the respondents and for us to move ahead with the hypothesis testing.

4.2 RESPONDENTS' CHARACTERISTICS AND CLASSIFICATION

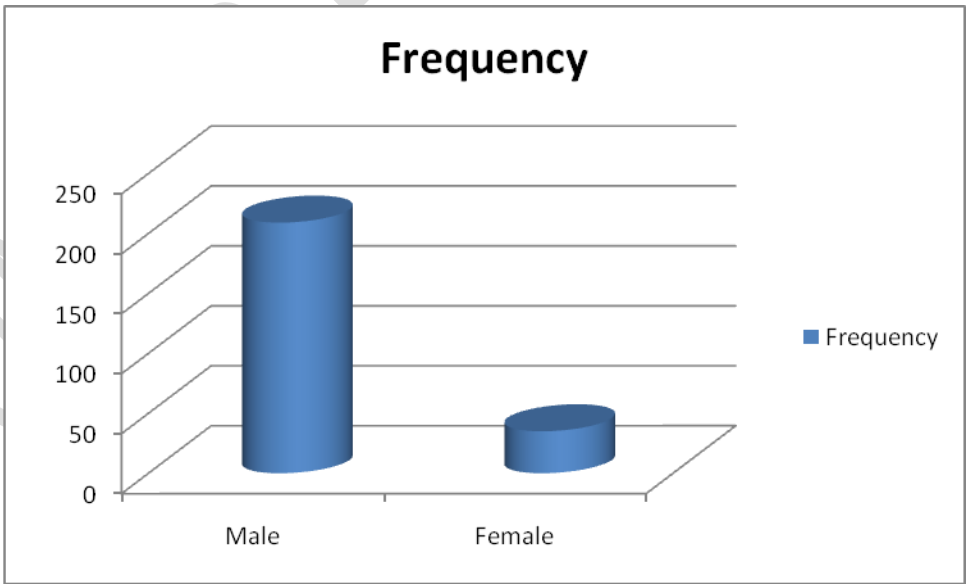


FIG 2 Distribution of the respondents according to their gender

Fig. 2 shows that out of the two hundred and forty four (244) respondents, two hundred and five (205) representing 85.7% are male while only thirty five (35) representing 14.3% are female.

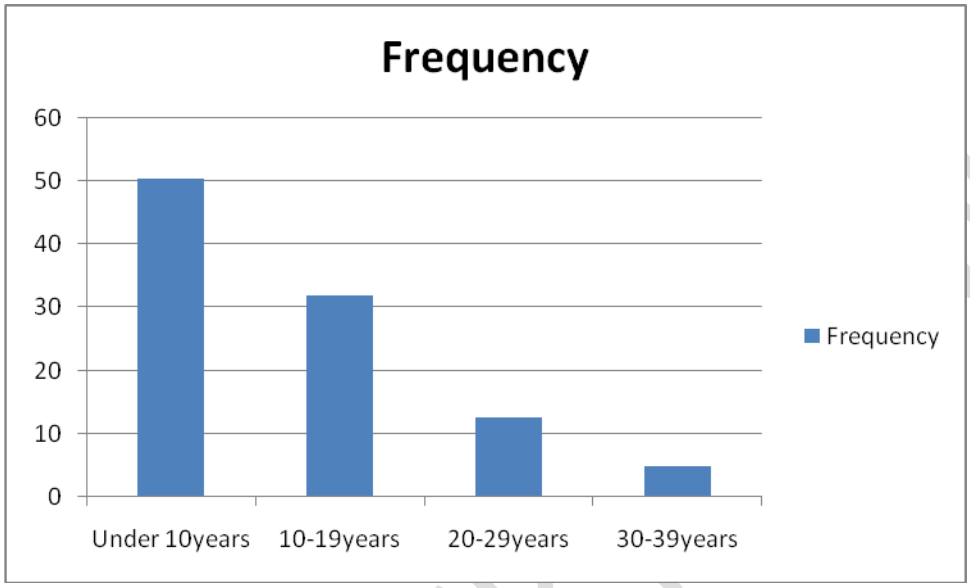


FIG. 3 Distribution of the respondents according to their Working Experience

Fig. 3 shows that 50.4% of the respondents have less than 10 years working experience, 32% has 10-19 years working experience, 12.7% has 20-29years, 4.9% has 30-39years.

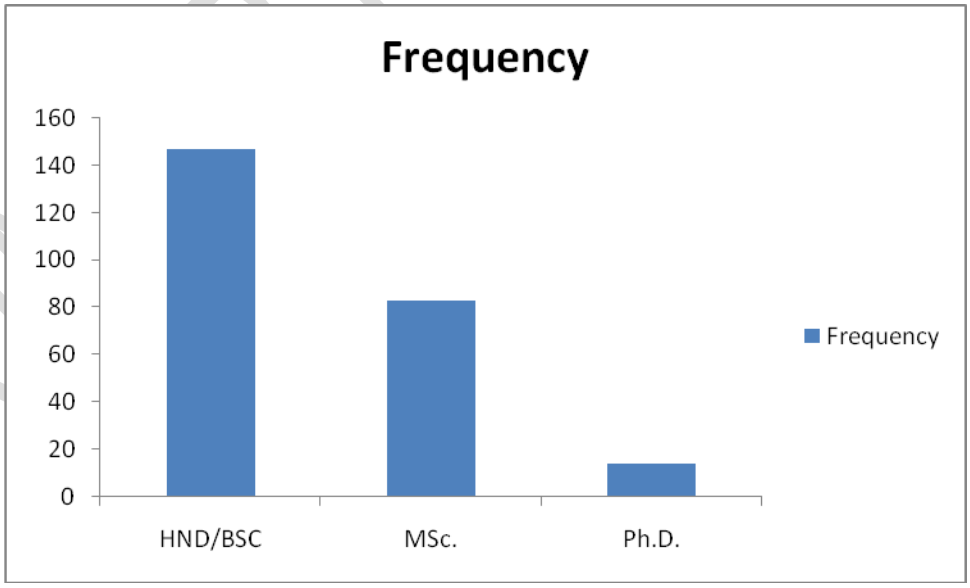
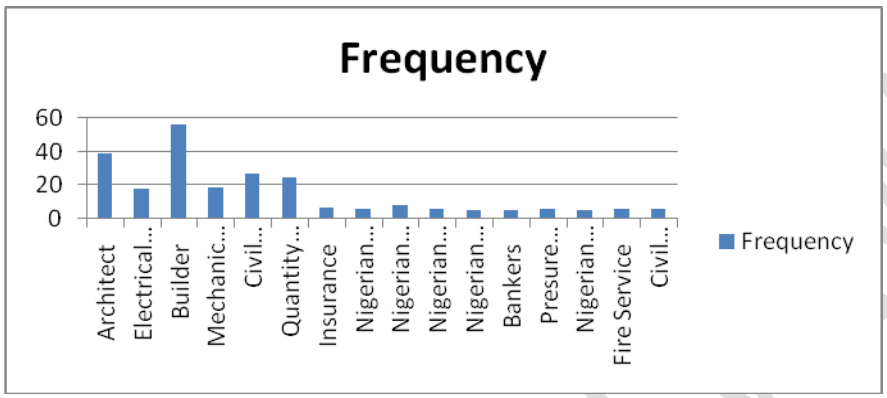


FIG. 4 Distribution of the respondents according to their educational level

From fig 4, we could see that 60.2% of the total respondents are holders of HND/BSc, 34% MSc while only 5.7% are holders of PhD.'\



VERTICAL SCALE IS WRONG!!!!

FIG. 5 Distribution of the respondents according to the education field

Fig. 5 indicates that 23% of the respondents are Architects, 8.6% are electrical engineers, 26.6% are builders, 13.1% are mechanical engineers, 13.9% are civil engineers, and 14.8% are quantity surveyors. 2.9% are from the insurance companies, 2.5% are from the Nigerian Army, 2.5% are from the Nigerian Navy, 3.3% are from the Nigerian air force, 2% is from the Red Cross, another 2% are bankers, another 2.5% are from pressure group, another 2% are from the Nigerian Police, another 2.5% are from the fire service while another 2.5% are from the Civil Defense Corp.

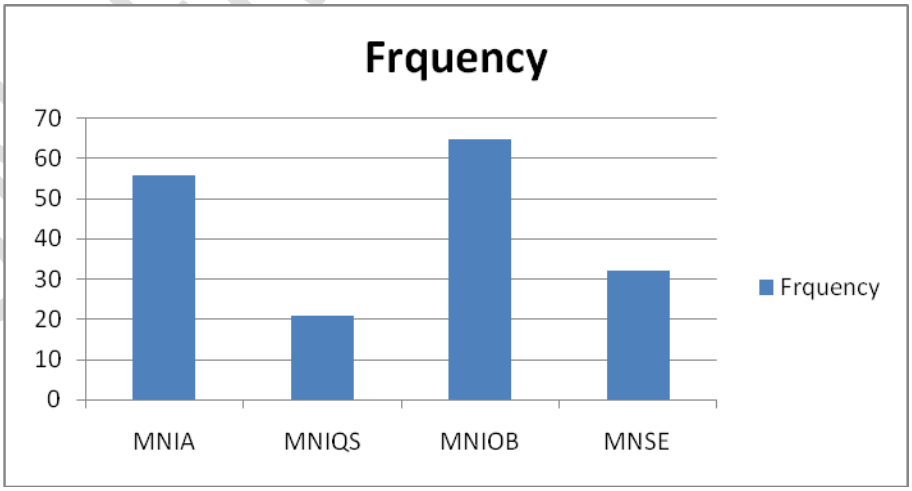


FIG. 6 Distribution of the respondents according to the profession registration

Fig. 6 indicates that 23.4% of the respondents are holders of MNIA, 27.5% holds MNIQS, 37.7% holds MNIOB, and 11.5% are holders of MNSE.

TABLE 3 Mean ranking of the factors that causes building collapse

Cause of building collapse	Mean response	Rank
Non enforcement of building code	4.7582	1
Inadequate knowledge of construction material	4.7172	2
Lack of on-site training	4.6844	3
Inadequate funds	4.6803	4
Construction problems	4.6680	5
Poor materials and workmanship	4.6434	6
Engagement of unqualified builders	4.6230	7
Unethical practices of professionals	4.5779	8
Site development errors	4.5738	9
Inadequate soil investigation	4.5369	10
Patronage of quakes	4.5328	11
Design errors	4.5123	12
Inadequate/lack of maintenance	4.4713	13
Unclear specification	4.4139	14
Non possession of approved drawings	4.3852	15
Operator error	4.3566	16

Source: SPSS Computation of Field Survey Data, 2017

Table 3 indicates that the prevalent cause of building collapse is Non enforcement of building code, followed by inadequate knowledge of construction material and workmanship, Lack of on-site training, Inadequate funds respectively. Other causes include Construction problems, Poor materials and workmanship, Engagement of unqualified builders, Unethical practices of professionals, Site development errors, Inadequate soil investigation, Patronage of quacks, Design errors, Inadequate/lack of maintenance, Unclear specification, non-possession of approved drawings, operator error. This data suggests that the majority of building collapses are traceable to human activity (or inactivity).

4.3.1 Test of Hypotheses

In order to correctly test the originally formulated hypothesis, the researcher selected an appropriate test statistics, i.e. one sample t-test for analysis of the collected data.

4.3.2Analysis of Data Using T-test

Decision Rule: Reject H_0 if p-value<0.05, otherwise accept H_0

4.3.2.1 Statement of Hypothesis One:

$H0_1$: Building collapsed has no significant impact on Socio-economic Development in River State.

TABLE 4 Analysis of Economic and Social Implications of Building Collapse

Economic and Social Implications of Building Collapses	Mean	t-value	p-value	Hypothesis
Loss of human life	4.7213	94.805	.000	True
Loss of materials	4.2869	54.569	.000	True
Loss of capital investments	4.5164	70.850	.000	True
Injury and pain to the body.	4.5738	69.381	.000	True

Source: SPSS Computation of Field Survey Data, 2017

Table 4 shows a test of significance for Economic and Social Implications of Building Collapse; t- value = 94.805, at P= .000 < 0.05 for loss of human life, t-value = 54.569 at P= .000 < 0.05, for Loss of materials, t-value = 70.850, at P= .000 < 0.05. 69.38, at P= .000 < 0.05. All these computed value of t-value exceeded theoretical value of p-value; therefore the null hypothesis will be rejected for these factors while we accept the alternate hypothesis and conclude that Building collapse has significant impact on Socio-economic Development in River State. Further interrogation on the causes of building collapse from other documented sources corroborates these findings. For example, this result is in line with the findings of Tribunal of Enquiry on building collapse that most building collapse has significant impact on the nation economy.

4.3.2.2 Statement of Hypothesis Two

$H0_2$: There is no statistically significant difference between the causes of building failure

TABLE 5 Analysis of causes of building collapse

Cause of building collapse	Mean response	t-value	p-value	Hypothesis
Non enforcement of building code	4.7582	96.307	.000	Sig
Inadequate knowledge of	4.7172	88.755	.000	Sig

construction material				
Lack of on-site training	4.6844	81.747	.000	Sig
Inadequate funds	4.6803	86.630	.000	Sig
Construction problems	4.6680	84.696	.000	Sig
Poor materials and workmanship	4.6434	91.716	.000	Sig
Engagement of unqualified builders	4.6230	78.947	.000	Sig
Unethical practices of professionals	4.5779	67.649	.000	Sig
Site development errors	4.5738	73.488	.000	Sig
Inadequate soil investigation	4.5369	68.956	.000	Sig
Patronage of quakes	4.5328	68.093	.000	Sig
Design errors	4.5123	69.357	.000	Sig
Inadequate/lack of maintenance	4.4713	65.441	.000	Sig
Unclear specification	4.4139	63.868	.000	Sig
Non possession of approved drawings	4.3852	59.526	.000	Sig
Operator error	4.3566	62.730	.000	Sig

Source: SPSS Computation of Field Survey Data, 2017

Decision: From table 5, p-value = .000 < .05 for all the factors that Causes building collapse; we therefore reject the null hypothesis and accept the alternative.

Conclusion: Since $H0_1$ is rejected at 5% level of significance, we therefore conclude that there is statistically significant difference between the causes of building failure.

5. RECOMMENDATIONS AND CONCLUSIONS

Security of life, property and store put resources into lodging must be ensured if the accompanying three suggestions are freely acknowledged and actualized. To start with, the crumple of structures can't be completely destroyed however can be limited if open feelings can be played down and the press can lay more accentuation on teaching the general population everywhere on the threats of the fall of a building. The general population must alert government on structures suspected to be a hazard to the lives of individuals living inside an area.

Government must be prepared to handle the entangled issue of building disregard by the people by and large. The best approach to handling the issue of building disregard ought to be multi-pronged, covering the four noteworthy territories: Legislation, implementation, support and help, exposure and government funded training. To accomplish this, legislature must give and keep up a modernized, proficient and easy to understand statutory building control administration to meet the private lodging advancement needs of Nigerians. Likewise, government should survey authorization approach against building issues that are of open worry, to improve building wellbeing. Government long haul target ought to be, to cultivate a building security culture among Nigerians so that all partners included (constructing proprietors, inhabitants, building proficient, temporary workers and laborers) will have the mindfulness to legitimately watch building wellbeing. A safe assembled condition must be supported if all worried in our group responsively have their influence. Second, government must set out on proactive strides by assembling enough political will to permit the Town Planning Authorities play out their capacities free. Government must understand that for the oversight bodies to be successful, they must be made in a political air where pioneers are straightforward, government employees are protected from political obstruction, and better motivators are given to debilitate debasement, to check the exercises of failing experts, individuals from staff of the Town Planning Authority and individual lodging designers, the lawful structure ought to be enhanced to guarantee smoother, less tedious and less troublesome approaches to lead business in the working of law courts. When this is set up, the individuals who mock the law can be expeditiously and intensely endorsed to guarantee strict consistence. Unending court cases over bad conduct ought to be debilitated by the legal if the present beat of building breakdown is to be turned around.

Government officials, the press, individuals from the common administration and the group have different parts to play in handling building breakdown wonder in Nigeria. Building development is a sensitive, refined and complex process, where inability to hold fast entirely to set down systems can bring about building breakdown. Consequently, hence all concerned people in building development ought to guarantee that they procure sufficient preparing information to comprehend the methods of development in order to diminish and along these

lines take out the rate of building breakdown in the nation. Notwithstanding, the general public, passing by social qualities have a few traits that can be utilized to encourage the achievement of building maintainability. At the point when these human traits are considered in conjunction with goals of future building speculators, creators, advancement experts combined with lodging venture motivators, construction laws and development benchmarks persisting structures will clearly be accomplished in the precise not so distant future. Hence, building that satisfies the factor of safety adds to assets stock to the country all in conformity with sustainable development goal-Vision 2030

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