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**Research Paper** 

# An Evaluation of Skilled Labour shortage in selected construction firms in Edo state, Nigeria

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**ABSTRACT:** The study investigated skilled labour requirement in the construction industry of Edo State. The study aimed at assessing the current state of the construction industry's skilled workforce, causes and prevalence of skilled labour shortage and the effect of skilled labour shortage in construction project delivery. The method employed for collection of data includes distribution of structured questionnaires. The data collected were analyzed using Frequency tables, percentages, mean response analysis, relative importance index and cross tabulation. The research identified the most severe factors responsible for labour shortage to include; no clear carrier path, high mobility of construction workers and low wages. The study found that construction firms are not sending their skilled workforce for training, and that the skilled workers are unwilling to recommend the profession to their children. The research revealed that the construction firms were paying extra money for labour, and Schedule delay in their construction programmes as a result of skilled labour shortage. The study found aging workforce in the construction trades sampled, and that the entrance of young people into the construction trades was very low.

KEY WORDS: Skilled Labour, Shortage, Construction Industry, Construction Firms

### I. INTRODUCTION

The construction industry occupies a focal position in a nation's economy. It is an essential contribution to the process of development [1]. The construction industry is a global industry known for its generation of jobs at different skill and professional levels. In terms of value of its output, its global market is reported to be around \$1.5 Trillion as of today [2]. The construction industry contributes about 5 percent to the Gross Domestic product GDP [3] in Nigeria. The author in [4] affirmed that it contributes about 50% percent of Nigerian government expenditure. It therefore shows that the construction industry is crucial in National development.

Modern construction is a complex, highly organized process. Not only is it a science and a commercial business, but it is a creative art. For the newest recruit to the mature craftsman of many years' experience, it is a rewarding, often tough and demanding discipline. Every person employed within the construction process makes a direct contribution not only to the community in general but also to the nation at large [5]. In world labour market, construction workers are said to be over 100 million, constituting 6-7 % of the world labour force [2]. In the construction industry employment is characterised by relatively high rates of attrition among subcontractors as well as waged workers, and this is manifested in periodic labour shortages [6; 7; 8; 9].

The findings of the Chartered Institute of Building survey (CIOB) [10] indicate that a shortage of Skills Labour continues to be a challenge for the construction industry. The CIOB [10] predicted that this issue is likely to worsen as the demand for construction increases.

The CIOB research findings indicate that people possessing crafts/trades and senior/middle Management skills are highly sought after. From time to time employers in a number of countries refer to the difficulties they have in recruiting labour of the requisite quality, even on occasion when the labour market is relatively slack. Yet academic work on this issue is relatively sparse and in particular little is known of the consequences of such situations. Despite the perceived importance of skill shortages in Nigeria, the literature addressing these issues is limited.

According to the Institute of Management and Administration cited in [11] the skilled craft shortage is not a shortage of workers rather it is a shortage of adequately trained skilled and productive workers available for certain jobs. With the construction industry requiring some of the most highly skilled workforce to do some of the most dangerous jobs, replacement and recruitment proves to be difficult. Reasons that have been given for the skilled labour shortage include lack of training, an aging workforce, poor image of the workers, and an industry that does not appeal to many youth [12;13;14; 15; 11].

The authors in [16] opined that skill shortages are a complex labour market Phenomenon, and are related to business performance. They went further to state that Skill shortages are often portrayed as a major problem for the economies of many countries. Yet, there is surprisingly little evidence about their prevalence, causes and consequences in the Nigerian construction industry. Although there are no statistics to show whether, there is shortage of skilled craftsmen in the Nigerian construction industry, expert and other stakeholders in the industry believe that there is shortage of skilled trades in the industry. This research is conducted in response to concerns from stakeholder about the perceived shortage of skilled Workers and the impact that this shortage may be having on the industry ability to meet the growing residential and commercial demand for construction. This study therefore assesses the state of the Nigerian construction industry with respect to skill labour shortage, the prevalence, causes and effects on building project delivery. The trades selected for this study were Bricklaying, Carpentry, painting and Plumbing. This trades were selected because of their level of dominance in building construction works.

### II. LITERATURE REVIEW

Research work of [15] revealed a number of factors which have combined to influence the construction skill shortfall, some of these include; The introduction of new tec hnologies which have reconstituted the skill required [17;12, 18]. The growth in self-employment and the use of labour only sub-contractors which have reduced the commitment and investment in training within the industry [19;20;21;22] self-employed craftmen in turn are not able to handle their qualification improvement issues and there is a direct correlation between the fall of trainee members and the numbers of self-employed [23;24; 25; 13;14;26].

The poor image of the industry which unfavourably affects the popularity as a career choice [12;13;14]. The image is low among workers themselves as the majority of construction crafts workers of various ages and experience would never recommend their trade to their children [26].

High mobility of construction workers as the result of unattractive image, unsafe work place, irregularity of the workload, lack of respect and opportunities for training.

The dissatisfaction with labour organization especially the unstable workload as the reason of the release by received workers. [27;28;29].

The site safety and quality of work always the least and last to be attended to as they are always the conflicting goals running in different directions to earning and speed (18-20).

Globalization has added also negative ethnic characterization of cultural differences of multi-lingual construction teams. [30;31;32;33].

The combination of these factors has led to a labour market reliant upon a casual workforce, incorporating high levels of self-employment, low levels of training investment and hence, low quality skills. [13;34;35].

### III. RESEARCH METHODOLOGY

The research examined the state of the Nigerian construction industry, its workforce, determined the prevalence of skilled labour shortage, assessed the causes of skilled labour shortage and the effects of skilled labour shortage on building project delivery.

The research involved gathering and collection of primary data. This involved responses to a personal interview with the aid of a structured questionnaire. Two (2) forms of questionnaires were designed and distributed. The first was designed to obtain information from managers in the construction industry, having construction projects in Edo state; the second one was designed to obtained information from skilled workers in the various trades to know their perceptions on key issues facing the construction industry. The construction trades selected for this study were Bricklaying, Carpentering, Plumbing and Painting. The choice of these trades was as a result of their level of dominance in the building industry. The distribution of these questionnaires was conducted to cut across the various sections or senatorial districts in Edo state. There are three senatorial districts in Edo state which includes: Edo south, Edo central and Edo north senatorial districts. A systematic random sampling technique was used in selecting the building contractors that were sampled in these senatorial districts, but the choice of each contracting firm was a function of the total number of such firms operating in that area. Construction trades were also sampled in these senatorial districts.

### SAMPLE FRAME AND SAMPLE SIZE

The sample frame for this study were construction firms registered with Edo State Government, University of Benin, Edo State University, Auchi Polytechnic and others having project with local government. A total of 200 firms were identified and used as the sampling frame. 30 % of the sample frame was used as the sample size for this study making a total of 60 firms for questionnaire type A. The first questionnaire was directed to the managers and supervisors of construction firms, (Questionnaire type A) while the second type of questionnaire was administered to the tradesmen (Questionnaire type B)

### METHOD OF DATA ANALYSIS.

In the analysis of the data collected for this research work, various methods of analytical/statistical techniques used were cross tabulation, percentage, frequency distribution, mean response analysis, and relative importance index.

### DATA ANALYSIS AND DISCUSSION OF RESULTS (QUESTIONNAIRE TYPE A)

Educational and professional qualifications of respondents

Table 1: Academic		Demonst
Description	Frequency	Percent
GCE/SSCEOL	7	19.4
B.Sc		
FTC	3	8.3
HND	1	2.8
MNIOB	14	38.9
MNIOS	2	5.6
M.Sc	1	2.8
Total	8	22.2
	36	100.0

Table 1 above represents the Academic and Professional qualifications of the respondents. This show that the respondent possess the required qualification in the industry to be able to contribute their quota effectively in this study.

Table 2: Froiession of Respondents in the Construction industry		
Description	Frequency	Percent
Estate surveyors	1	2.8
Architecture	4	11.1
Building	14	38.9
Civil Engineering	6	16.7
Quantity Surveying	6	16.7
Others	5	13.9
Total	36	100.0

## Table 2. Duefoggion of Degnandants in the Construction industry

Table 2 shows the various professions of respondents sampled. This shows that the respondents cut across the various professional who possess the require knowledge about the subject under survey to contribute their quota.

Table 3: Respondents Working Experience			
Description	Frequency	Percent	
<2yrs	1	2.8	
2-4yrs	10	27.8	
5-7yrs	2	5.6	
8-10yrs	4	11.1	
over 10yrs	19	52.8	
Total	36	100.0	

Table 3 shows the number of years of respondents working experience in the study area. This shows that the respondent sampled have relevant experience in the industry to be able to respond all the questions asked.

Table 4: Nature of Business set-up			
Nature of Business	Frequency	Percent	
Sole proprietorship	11	30.6	
Partnership	1	2.8	
Limited liability company	10	27.8	
Public liability company	14	38.9	
Total	36	100.0	

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Table 4 shows the nature of Business set-up of the respondent sampled. The implication of this is that all the firms sampled cut across small, medium and large business enterprises.

Category of Registration	Frequency	Percent
Category A	6	16.7
Category B	4	11.1
Category C	22	61.1
Category D	4	11.1
Total	36	100.0

Table 5: Category of Registration of the Company with Federal Ministry of workers and Housing

Table 5 shows the category of registration of the firm sampled. 16.7% were registered in category A, 11.1% were registered in category B, while 61.1% were registered under category C and 11.1% were registered under category D. This show that all the firm sampled were registered under different categories, and that they execute jobs ranging from small scale to large scale.

Table 6: Nature of work undertaken			
Nature of work undertaken	Frequency	Percent	
Building works	16	44.4	
Civil Engineering works	3	8.3	
Both building and civil Engineering			
	17	47.2	
Total	36	100.0	

Table 6 shows the nature of work undertaken by the various firms sampled. 44.4% executed Building works, 8.3% undertook Civil Engineering works while 47.2% were involved in both Building and Civil Engineering works.

Table 7: Number of permanent Employees			
Number of permanent employees	Frequency	Percent	
< 30 employees	17	47.2	
30 -100 employees	10	27.7	
Over 100 employees	9	25.0	
Total	36	100.0	

Table 7 shows the number of permanent employees working in the construction companies sampled. 47.2% had less than 30 employees, while 27.7% had between 30-100 employees and 25.0% had above 100 employees in three companies as permanent staff.

Table 8: Method of Recruitment.			_
Method of recruitment	Frequency	Percent	_
Formal interview through head office only	9	25.0	
Formal interview through regional	3	8.3	
	10	07.0	
On site without formal interview	10	27.8	
Combination of all of the above	14	38.9	
Total	36	100.0	

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Total

Table 8 shows the method of recruitment adopted in the firms sampled. This shows that the companies used different method of recruiting employees, depending on the one that is suitable to them.

Table 9: Skilled labour Shortage			
Description	Frequency	Percent	
Yes	26	80.6	
No	7	19.4	
Total	36	100.0	

Table 9 shows whether there is skilled labour shortage in the construction industry in Nigeria. 80.6% of the respondent agreed that there is skilled labour shortage, while 19.4% were of the view that there is no skill labour shortage. The implication of this is that majority of the managers agreed that they were experiencing skilled labour shortage in the various trades in the construction industry.

Table 10: Sk	Table 10: Skilled labour shortage in bricklaying	
Description	Frequency	Percent
YES	24	66.7
NO	12	33.3
Total	36	100.0
Table 11: Sl	killed labour shor	tage in carpentry
Description	Frequency	Percent
YES	27	75.0
NO	9	25.0
Total	36	100.0
Table 12: S	killed labour shor	tage in plumbing
Description	Frequency	Percent
YES	20	55.6
NO	16	44.4
Total	36	100.0
Table 13: S	killed labour sho	rtage in painting
Description	Frequency	Percent
YES	29	80.6
NO	7	19.4

Tables 10, 11, 12, and 13 shows the skilled labour shortage in the four trades sampled in the construction industry. 66.7% experience skilled labour shortage in Bricklaying, 75% experience skilled labour shortage in carpentry while 55.6% experience skilled labour shortage in plumbing and 80.6% experienced skilled labour shortage in painting. This shows that mangers were experiencing skilled labour shortage in the four trades sampled.

100.0

36

Table 14: Rate of labour shortage in Bricklaying			
Description	Frequency	Percent	
very low	9	25.0	
Low	16	44.4	
High	Т	19.5	
very high	4	11.1	
Total	36	100.0	

Table 14 shows the rate of labour shortage in bricklaying. 25% of respondents agreed that the rate of labour

shortage were very low, 44.4% agreed that the rate of labour shortage were low, while 19.5% of respondents agreed that the rate were high, and 11.1% of the respondents agreed that the rate were very high. This shows that the rate of labour shortage in bricklaying have not reached an alarming rate.

Table 15: Rate of Labour shortage in Carpentry			
Description	Frequency	Percent	
very low	8	22.2	
Low	17	47.2	
High	6	16.7	
very high	5	13.9	
Total	36	100.0	

Table 15 shows the rate of labour shortage in carpentry. 22.2% of respondents agreed that the rate of labour shortage were very low, 47.25 agreed that the rate were low, while 16.7% agreed that the rate were high and 13.9% agreed that the rate were very high.

Table 16: Rate of labour shortage in Plumbing			
Description Frequency Percent		Percent	
very low	6	16.7	
Low	5	13.9	
High	16	44.4	
very high	9	25.0	
Total	36	100.0	

Table 16 shows the rate of labour shortage in plumbing. 16.7% of the respondents agreed that the rate of labour shortage in this trade were very low, 13.9% agreed that the rate were low while 44.4% agreed that the rate were high and 25.0% agreed that the rate were very high.

Table17: Rate of labour shortage in Painting			
Description	n Frequency Percent		
Very low	19	52.8	
Low	9	25.0	
High	7	19.4	
very high	1	2.8	
Total	36	100.0	

Table 17 shows the rate of labour shortage in painting. 52.8% show that the rate were very low, 25% show that the rate were low, while 19.4% show that the rate were high and 2.8% show that the rate of shortage were very high. This shows that the rate of labour shortage in this trade is relatively low.

Table 18 : Relative Importance Index for the rate of skilled labour shortage			
Question 15-17		RII	Rank
q15c	Rate of labour shortage in plumbing	0.67	1
q15b	Rate of labour shortage in carpentry	0.53	2
q15a	Rate of labour shortage in bricklaying	0.52	3
q15e	Rate of labour shortage in painting	0.34	4

RII was calculated for the rate of skilled labour shortage among the trades surveyed.

Table 18 shows the results of the relative importance index that were conducted the rate of skilled labour shortage in the five trades sampled (plumbing, carpentry, bricklaying and painting). The result shows that the rate of skilled labour shortage in plumbing was ranked number 1 followed by carpentry, bricklaying and painting respectively.

		MRA	Rank
q16i	No clear cut career path	2.83	1
q16d	High mobility of construction workers	2.69	2
q16h	Low wages	2.67	3
q16j	Diminishing craftsperson training programme	2.61	4
q16b	Growth of self employment	2.58	5
q16e	Dissatisfaction with labour organization	2.53	6
q16a	Introduction of new technologies	2.47	7
q16g	Ethnic characterization	2.44	8
q16f	Poor safety of construction work	2.31	9
q16c	Poor image of the industry	2.03	10

Table 19: Mean Res	ponse Analysis for ca	auses of skilled labour shortage.

### MRA – Mean Response Analysis

Table 19 shows the result of the mean response analysis that was conducted for the identified causes of skilled labour shortage in the construction industry. In the ranking No clear cut career path came first, followed by High mobility of construction workers, Low wages, Diminishing craftsperson training programme, Growth of self employment respectively while Poor image of the industry had the lowest ranking.

### Questionnaire Type 2

Table 20	): Type	of trac	le/craft
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Description	Frequency	Percent
Carpenters	23	25.8
Bricklayers	25	28.1
Plumbers	21	23.6
Painters	20	22.5
Total	89	100

Table 20 shows the types of trade that were surveyed for this study. Thirty questionnaires were printed and distributed for each trade of four (carpenters, bricklayers, painters and plumbers) making a total of one hundred and twenty (120) questionnaires. The percentage response rate is 74% which is adequate for the project work.

Table 21: Sex of the craft			
Description	Frequency	Percent	
Male	89	100.0	

Table 21 show the sex of the respondents craft in the construction industry in the study area 100% were male, this shows that the craft in the study area were male dominated.

Table 22: Age of craft men			
Description	Frequency	Percent	
18-25yrs	4	4.5	
26-33yrs	17	19.1	
34-41yrs	26	29.2	
42-49yrs	24	27.0	
Above 50yrs	18	20.2	
Total	89	100.0	

Table 22 show the Age of craftmen surveyed. 4.5% were between 18-25 years old, 19.1% were between 26-33

years of Age, 29.2% were between 34-41 years of Age while 27% were between 42-49 years of Age and 20.20% were above 50 years. This shows that 76.4% of the craftmen have their Ages above 33 years. This shows that the rates of new entrance of young people into the construction trade were very low and it poses serious implication for the future of the construction industry in Nigeria in the area of skilled labour requirement.

### Table 23: Place of Residence in Relations to site/office Description Frequency Percent Very far 24 27.0 Not too far 55 61.8 10 Close 11.2Total 89 100.0

Table 23 shows the place of residents of the respondents in relation to their site offices. 27% of the respondents choose very far, 61.8% choose not too far and 11.2% close. The implication of this is that if the company does not have means of transportation for transporting the workers to site. It then means that workers were incurring more expenses in order to get to their various sites.

Table 24: Nature of Employment			
Description	Frequency	Percent	
Permanent staff	2	2.2	
Daily paid	21	23.6	
Contract staff	40	44.9	
Sub contractor	26	29.2	
Total	89	100.0	

Table 24 shows the nature of employment of the skilled labour. Only 2.2% of the respondents were permanent staff of the construction company, 23.6% were engaged on daily paid, while 44.9% were contract staff and 29.2% were sub-contractors. The implication of this is that the construction firms were not employing skilled labour as permanent staffs of the construction firms.

Table 25: Employment Qualification of Crafts men/trade			
Description	Frequency	Percent	
No response	1	1.1	
Primary school plus apprenticeship	53	59.6	
Modern school plus apprenticeship	5	5.6	
Secondary school plus apprenticeship	18	20.2	
Technical school graduate	12	13.5	
Total	89	100.0	

Table 25 shows employment qualification of crafts men/trades. 59.6% of the respondents holds primary school certificates plus apprenticeship, 5.6% of the respondents holds modern school certificates plus apprenticeship while 20.2% of the respondents holds senior secondary school certificates plus apprenticeship and 13.5% were technical school graduates. The implication of this is that a higher percentage has only primary school certificates and might not be able to take down instructions pass to them by the supervisor accurately.

### Table 26: Level of Satisfaction of Employees on the amount of wages/salaries earns.

Description	Frequency	Percent
No response	2	2.2
Very good	13	14.6
Good	32	36.0
Fair	25	28.1
Poor	17	19.1
Total	89	100.0

Table 26 show the level of satisfaction of employees on the amount of wages earned. 14.6% of the respondents say the wages is very good, 36% of respondents say the wages were good, while 28.1% say the wages were fair and 19.1% say the wages were poor. The implication of this is that a larger percentage is not satisfied with the wages earned.

Table 27: Skilled Labour Shortage					
Description	Frequency	Percent			
No response	4	4.5			
Yes	59	66.3			
No	26	29.2			
Total	89	100.0			

Table 27 shows the result of skilled labour shortage among the skilled labour force. When the respondents were asked whether there was skilled labour shortage in their trades, 66.3% of the respondent picked yes while the 29.2% pick no and 4.5% were not having any response.

### Table 28: Regularity of Training for permanent staff of construction

Description	Frequency	Percent
No response	18	20.2
Regular	3	3.4
Not regular	7	7.9
Never on training	61	68.5
Total	89	100.0

Table 28 investigated the training of staff of construction firms. The respondents were asked on how regularity their firms send them of training. 20.2% of the respondents hard no response, 3.4% of the respondents say there were sent regularly for training, while 7.9% of respondents say the training were not regular, and 68.5% of the respondents say they were never sent on training.

Description	Frequency	Percent	
No response	24	27.0	
Cost	48	53.9	
Fear of leaving for another company	14	15.7	
Others	3	3.4	
Total	89	100.0	

### Table 29: Reasons why Construction firms are not sending out workers for training

Table 29 shows the result of the reasons why construction firm were not training their workers. When the respondents were asked the reasons why the construction firms were not sending out workers for training 27% of the respondents had no response, 53.9% of the respondents say the reason were cost, while 15.6 say the reason were fear of leaving for another company.

Table 30: Recommendation of this trade or <b>j</b>	profession for res	pondents Children
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Description	Frequency	Percent
No response	17	19.1
Yes	18	20.2
No	54	60.7
Total	89	100.0

Table 30 shows the result of the recommendation of trade or profession to respondents' children. When the respondents were asked whether they would recommend this trade or profession for respondent's children, 20.2% of the respondent's says, yes while 60.7% say no and 19.1% had no response. The implication of this is that craft men were not proud of their profession. When the respondents were asked the reasons why this trade

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or profession cannot be recommend for respondent's children, 4.6% had no response, 18.0% says the reasons were Low wage, 16.9% say the reason were no clear cut carrier path, 3.4% says the reason were poor safety of construction work, while 43.8% say the reason were poor image attached to the trade and 3.4% of the respondents says the reason were other different from the ones above.

Table 31: Type of trade/craft * Age (Crosstab)							
Description		Age					Total
Type of trade/craft Carpenters	Count	18- 25yrs 0	26- 33yrs 1	34- 41yrs 7	42- 49yrs 4	above 50yrs 11	23
	% within Type of trade/craft % within Age	.0% .0%	4.3% 5.9%	30.4% 26.9%	17.4% 16.7%	47.8% 61.1%	100.0 % 25.8%
	% of Total	.0%	1.1%	7.9%	4.5%	12.4%	25.8%
Bricklayers	Count	4	6	8	4	3	25
	% within Type of trade/craft % within Age	16.0%	24.0% 35.3%	32.0% 30.8%	16.0%	12.0%	100.0 % 28.1%
	% of Total	1 5%	6 7%	0.0%	1 5%	3 /0%	28.1%
Plumbers	Count	4.5% 0	0.7% 7	9.0% 0	4.5% 10	3.4 <i>%</i>	23.1%
	% within Type of trade/craft	.0%	33.3%	.0%	47.6%	19.0%	100.0 %
	% within Age	.0%	41.2%	.0%	41.7%	22.2%	23.6%
	% of Total	.0%	7.9%	.0%	11.2%	4.5%	23.6%
	Description % within Type of trade/craft	Age 18- 25yrs .0%	26- 33yrs 15.0%	34- 41yrs 55.0%	42- 49yrs 30.0%	above 50yrs .0%	Total 100.0 %
Type of trade/craft Count	% within Age % of Total 4	.0% .0% 17	17.6% 3.4% 26	42.3% 12.4% 24	25.0% 6.7% 18	.0% .0% 89	22.5% 22.5%
% within Type of trade/craft	4.5%	19.1 %	29.2%	27.0 %	20.2%	100.0%	
% within Age	100.0%	100%	100.%	100%	100.%	100.0%	
% of Total	4.5%	19.%	29.2%	27.%	20.2%	100.0%	

Table 31 shows the result of cross tab for type of trade/craft age, 0% of the carpenters have their ages between 18-25 years, 4.3% of the carpenters have the ages between 26-33 years, 30.4% of the carpenters have their Ages between 34-41yrs, while 17.4% of the carpenters have their Ages between 42-49 yrs, and 47.8% of the carpenters have their Ages above 50 yrs.

The implication of this is that there were no new entrance of young people into the carpentry profession and over 45% of the carpenters already have their Ages above 50 years and they are still climbing. This is a serious implication for the construction industry in Edo state Nigeria.

### Types of trades Bricklayers

16% of the Bricklayers have their Ages between 18-25 yrs, 24% of the Bricklayers have their Ages between 26-33yrs, 32% of the Bricklayer has their Ages between 34-41 yrs, while 16% of the Bricklayers have their Ages between 42-49 years and 12% of the Bricklayers have their Ages above 50 years. This shows that 60% of the Bricklayer has their Ages above 33yrs. The entrance of young people into this trade is low but compared to the trade of carpenters, the entrance is still better.

### **Plumbers**

From the plumbers surveyed 0% of them have their Ages between 18-25yrs, and 34-41 yrs 33.3% have their Ages between 26-33 yrs, while 47.6% of the plumbers have the Ages between 42-49 yrs and 19% of the plumbers have their Ages above 50 years. This shows that about 66% of the plumbers have their Ages above 41 yrs. Old. This again shows that the entrance of young people into this trade is very low.

### **Painters**

0% of the painters have their Ages between 18-25 years, and above 50 yrs. 15% of the painters have their Ages between 26-33 yrs, while 55% of the painters have their Ages between 34-41 years and 30% of painters have their Ages between 42-49 years. This shows that 85% of the painters have their Ages above 33 years. This show that there experience workers on the construction industry but the entrance of young people into this trade is very low.

		RII	Rank	-
q17a	Paying extra money for labour	0.6875	1	
q17c	Schedule delay caused by labour shortage	0.680556	2	
q17b	Encountering cost overruns	0.659722	3	

Table 32: Relative Importance index for the effects of labour shortage

Table 32 shows the result of relative importance index that were conduct for the effects of skilled labour shortage in the construction industry. The result show that paying extra money for labour was ranked no 1 followed by schedule delay caused by labour shortage (No 2) and encouraging cost overruns was ranked number 3.

### IV. CONCLUSION

In the assessment of skilled labour requirements in the construction industry in Edo State, Nigeria, 80% of the managers surveyed agreed that they were experiencing construction skilled labour shortage in the four trades sampled. (i.e Bricklaying, carpentry, painting and plumbing). 75% of carpenters, 56% of Bricklayer, 76% of plumbers and 65% of painters surveyed affirmed that there were skilled labour shortages in their various trades. The research found that the most severe factors responsible for the skilled labour shortage were; No clear carrier path, High mobility of construction workers, Low wages, Diminishing craftsperson Training programmes.

The research revealed the effects of skilled labour shortage to include; (1) paying extra money for labour (2) Schedule delay caused by labour shortage and (3) cost overruns. The findings reveals aging workforce in the construction trades sampled, as over 65% of the carpenters were above forty two (42) years old, 60% of the Bricklayer were above 33 year old, about 65 of the plumber were above 42years and 85% of the painters were above 42years. The research found that the entrance of young people of between 18 -25years into the construction trades sampled were very low.

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