Comparative Study of Construction Industry’s Apprenticeship Practices in Pakistan and Nigeria

M. I. Anyakora, J. U. Osagie, Y. L. Gambo and R. O. A. Iyagba

1 Department of Estate Management, University of Lagos

2 Department of Estate Management and Valuation, Abubakar Tafawa Balewa University, Bauchi,

3 Department of Building, University of Lagos

Abstract

The study compared and analyzed apprenticeship practices in Pakistani and Nigerian construction industry with a view to proposing practical measures which will improve Apprenticeship Training (AT) policy, and facilitate participation by all stakeholders. Descriptive Statistics was employed to analyze the data. The study showed that AT scheme is a widely recognized means of skills acquisition in construction industries in the two countries. In Pakistan, firms having 50 workers and above are mandated to operate AT scheme, although no such law exists in Nigeria despite that 83.7% of the surveyed firms in Nigeria operate AT schemes. Differences in the countries’ practices were identified in the areas of mode of funding, and certification of competence. In both countries companies bear the full cost of AT, however firms in Pakistan receive tax rebate benefits for operating AT scheme while (91.9%) of the respondents in Nigeria confirmed that such fiscal benefit is not available to firms that run AT scheme. Also, Pakistan has a uniformly rated compulsory certificate for AT across the industry as different from Nigeria. The paper recommended that government should enact laws to regulate apprenticeship training in Nigerian construction industry for uniformity of practice and better commitment by all stakeholders in order to achieve better training outcome.

Keywords: Apprenticeship, Construction Industry, Nigeria, Pakistan, Training
Introduction

The world changing realities of globalization, competitiveness and knowledge based economy, strongly underscore the importance of training and skills acquisition among workers. International Labor Organization ILO (2009) enunciated the importance of training in a fast changing world when it asserted that "The illiterate of the 21st century will not be those who cannot read or write, but those who cannot learn, unlearn, and relearn". To some extent this nascent reality in learning, explains why every industry in the world's globalized economy is seeking ways of gaining competitive advantage particularly in the area of skilled human capital (workforce). The Nigerian construction industry is not insulated from international competition and as such needs to maintain and improve its core competencies by continuous training of both the present crop of workers as well as the next generation of skilled workers.

Moreover, indigenous skilled work force in the construction industry in Nigeria appears to be aging. As the skilled trades men retire, they take with them a lifetime of skills and expertise of their trades. This recent trend in trade work force is of great concern, even in international arena as the Canadian Council on Learning CCL (2006) lamented that skilled trade labor is ageing more rapidly than the overall work force. The exit of ageing experienced workers leaves potential gaps in the labor force. Filling this gap requires new supply of young skilled workers in the various trades. Earlier studies by Kilby (1964); Adeniyi (1980); Agbola (1993); Onibokun (2002); and Asghar and Siddi (2008) revealed that skilled labour shortage exists in construction industries in many developing countries including Nigeria and Pakistan. Sustainable strategy to stave off skilled labor shortages, especially at the time of increased construction activities is for firms in the construction industry to have a steady policy to attract, train, retrain, and retain qualified tradesmen. ILO (2009) pointed out that Apprenticeship is an important route to skills acquisition in most African countries including Nigeria.

Apprenticeship Training Programs (ATPs) in the construction industry of a nation ought to be properly articulated, and regulated in order to yield expected benefits to all stakeholders. A good apprenticeship training program leads to skilled human capital development. Knowledge based human resource is increasingly recognized as a basic form of capital for economic development of nations. Availability of local human capital both in quantitative and qualitative terms is very crucial in construction industry for global competitiveness, particularly in a developing country like Nigeria, with low per capita income and weak local currency exchange rate against other major currencies. Prevailing macroeconomic conditions of most developing economies including Nigeria, makes it uneconomical for the construction industry to rely on imported skilled workforce. Construction industry concern for skills acquisition is genuine and proper in view of the huge labour cost involved in construction projects. Agbola, (1985) revealed that construction industry manpower costs constitute about 40% of the total housing construction costs.

Human capital resources required for building construction includes Bricklayers/Masons, Carpenters, Welders/Iron-benders, Painters, Electricians
among other Artisans including general labour. In most construction sites Trades men (Artisans) and general labor tend to outnumber the core professional group e.g. Engineers, Quantity Surveyors, and Project Accountants just to mention a few. Often there is high incidence of incompetence among the artisan group. Largentaye (2009) supports the proposition of high rate of skill incompetence among most trades labour in developing countries especially in sub-Saharan Africa. With the foregoing facts, the need for AT as a means for developing skilled human capital in construction industry, cannot be over emphasized.

It is possible to expand national employment opportunities in a country through a well articulated AT scheme. In support of this view, Askilden and Nilsen (2005) cited in Tansel and Ogawa (2008) opined that many countries have applied ATP as a pivot to leverage youths into gainful employment in the labor market. Skill is dynamic as it trails technological changes. Making a case for sound AT and continuous training of workers. In the UK, Christopher Banks, Chairman of Learning Skills Council in the UK (Learning Skills Council, 2008), argued that as the pace of change accelerates, skills must be improved to keep pace or else international competitiveness will suffer. Against the above study background information this study derived its aim and objectives as stated below.

The aim of this study is to investigate, analyze, and compare construction industries' apprenticeship practices in the two countries and the training outcomes with a view to proffer strategies for improving construction industry AT system in Nigeria. In the light of the forgoing, the study identified the legal and regulatory frameworks upon which construction industry AT practices rested in Nigeria and Pakistan; assessed the length of time spent in AT schemes in the selected countries; examined the source/s of AT funding in the two countries; investigated whether AT in one company actually avails employment opportunities to the successful trainee in other companies in the industry, and finally; and also ascertain the nature of AT certification in practice and the extent educational value accorded to AT certificates in formal vocational skills system.

Literature Review

In order to create a deeper appreciation of the long time use of AT scheme to transmit skills from one generation to another by man in different places and cultures, this section started with a brief historical evolution of AT. It immediately reviewed literatures that are relevant to AT practices globally. This was carried out with a view to adopting and or creating operational variables that will be appropriate for empirical investigations in this study. In order to actualize country to country comparison, the study deeply examined: legal frameworks and regulation formats, perceptions on; AT duration, mode of fund AT programs, employability prospects that is available after AT program, and finally the AT upwards career mobility prospect. The review is also aimed at identifying the research gap that exists in facilities management discipline generally and in the performance of buildings in particular

Apprenticeship Evolution

Apprenticeship scheme is an age long route towards skills acquisition. In Nigeria, apprenticeship has been an ancient method
used in training the youths in trades. Okafor & Akinwale (2006) reported that apprenticeship in farming, hunting, carving, carpentry, boat building, and house building was common in traditional Nigerian setting. With apprenticeship learning culture already existing, the modern construction industry in Nigeria naturally developed its apprenticeship system from the informal hereditary on-the-job training system that had existed along family lines. Pakistani Apprenticeship Ordinance 1962 also traced similar evolutionary pattern in Pakistan. However, in complex competitive business environment of the present age many countries have responded to the need for efficient skill training in various industries through better regulation of this system of learning.

Legal Framework and Regulation of Apprenticeship Training
Gospel (1998) observed that Apprenticeship programs underpinned by a legal framework and state support, have remained strong in Germany, Austria, Switzerland and other European countries. Gospel submitted that for Britain, modern apprenticeship is a major attempt to revive the labor market via vocational education and training. Asghar and Siddi (2008) reported that through the Apprenticeship Ordinance (AO) of 1962, Pakistan was able to provide, promote, and regulate a systematic apprenticeship programs in her industries; and prescribe certain minimum standards of skills to be imparted in apprenticeship training for prescribed trades. The AO document prescribed 157 apprenticeable trades and extends mandatory apprenticeship to the whole of Pakistan. AO also identified the degree of skill involved in the prescribed trades, the amount of practical training and related theoretical instruction necessary for attaining the laid down standards of skill and proficiency in the trade. It also provides for employers' and apprentices' obligations respectively. Employers of 50 and above numbers of personnel were mandated by this law, but also encouraged through tax relief provision, to set up apprenticeship programs. State Inspectors were given powers in this legislation to enter business premises without prior notice for the purpose of inspecting AT process. Offences, penalties, and procedures for conflict were clearly spelt out. A tripartite Advisory Committee was made responsible for supervision.

Contemporary approach in modern governance is for a designated department or government agency to be solely responsible for the administration of AT in all trades and industries. In some countries, the Ministry of Education is in charge of this responsibility. Germany, Denmark and the Netherlands are good examples of this arrangement, while in Austria it is the Economic Affairs Ministry that plays this role. In the US, the Department of Labor (DOL) is in charge of this duty, with strong collaborative efforts between the US DOL and the various states departments of labor (SDOL) in apprenticeship training of American youths. The absence of a central supervisory organ for both formal and informal AT schemes, will most likely give room to varying standards among the training organisations. The variation in standard will most likely exist in the area of training duration because of its direct correlation with training cost.

Training Duration
Time is required in every apprenticeship training program. It is natural to expect that
trades involving difficult tasks or high precision skills will demand longer duration of training than the less tasking or the ones that require less precision. On the above premise, one may tend to reason that it takes the same number of years to produce qualified crafts men in similar trades in different companies within the construction industry in a country. Absence of regulation with regards to training duration would mean that while some firms in the industry are training apprentices for sufficiently long period of time necessary to acquire mastery of a particular trade, others may be spending insufficient time on similar program. Where significant difference exists in the training period for same trades across the construction industries of two or more countries, one would likely expect different levels of training outcomes in those countries, other factors being constant.

**Mode of Funding Apprenticeship Training**

ATP requires sustainable funding in order to remain operative. In traditional apprenticeship systems, craft masters usually charge fees for undertaking to teach their apprentices. However, the trend is different in modern apprenticeship settings where it is sometimes expected of the employer to pay some stipend to trainees in addition to training. Without regulation, the tendency will be for many employers in the private sector, including some operators in the construction industry to seek to cut operational costs by avoiding skills development costs. The World Bank (2007) revealed that the importance of AT is often neglected in many economies.

Government's active regulation of ATP remains the appropriate means to bridge the skills gap created by formal training neglect in any country. In Pakistan, construction firms that have up to fifty workers are mandated to establish and operate apprenticeship programs entirely at their own cost. However, the firms are encouraged to do this through tax relief incentive for training related expenses. The way apprenticeship training programs among construction firms in Nigeria are funded was later investigated in this study through survey data analysis. Nevertheless it suffices to submit at this level that, in the absence of statutory mandate for establishing apprenticeship schemes and the number of in-takes, construction firms would always want to critically consider some economic parameters before establishing apprenticeship programs often following Steven's Investment Model 1994 cited in Brunello (2009).

**Apprenticeship Training Employment Opportunities**

ATPs offer many opportunities to youths and unemployed people who are willing to learn performance skills in specific trade areas. Apprenticeship program is a viable avenue for obtaining lucrative, professional, and marketable career. In most cases, apprenticeship program offers paid employment while undergoing career training. AT provides opportunity for successful trainees to become proficient in an occupation, learning both the practical aspects of the occupation along with the relevant basic theory sometimes spending less time as is the case in attending formal education. Monk, Sandefur, and Teal (2007) maintained that successful AT increases the probability of informal employment relative to having no job. Besides, a certified ATP can also offer an opportunity for change of employment career from the informal to the formal sector, most likely with better employment benefits and increased
prospects for progress. Thus a good Apprenticeship training system offers substantial benefits to stakeholder groups including the trainee.

**Apprenticeship Training Benefits**

Apprenticeship training program as a system of learning and transfer of trade skills offer numerous benefits to all classes of stakeholders. This has been confirmed through previous studies in different geographical settings. Asghar and Siddi (2008) confirmed that in Pakistan a successful apprenticeship trainee acquires industry based skill which brightens his employment opportunity in the company and also in the entire industry. Sparks, Ingram, and Philips (2009) in adult apprenticeship study in Australia, asserted that organisations operating Apprenticeship training programme have a good opportunity of inculcating desired workplace protocols and standards to a prospective trade man. Breyer (2007) maintained that apprenticeship training in the informal sector in Ghana tend to increase the trainee's opportunity for employment both in the formal and informal sectors.

Apprenticeship training programs produce highly skilled workforce needed for economic development of a nation and can be used as sustainable means of increasing youth employment. Parey (2009), elucidates this point further and argued that firm based apprenticeship training leads to substantially lower unemployment rates.

**Overview of Apprenticeship Training in Nigeria**

In Nigeria, the first attempt to formally regulate apprenticeship training in a modern way was provided for in the Labor Code Act of 1st June 1946. This piece of legislation made minimal provisions for the conduct of ATP. It only provided a guide as to how a minor can be signed into apprenticeship contract for a term not exceeding five years. This document did not create any form of institutional framework nor did it place the responsibility for apprenticeship administration on any agency or group. Thus apprenticeship training in Nigeria largely followed the traditional system for many decades until 1971 when Industrial Training Fund (ITF) was established as the premier skills acquisition training institution in Nigeria. Two similar institutions namely: (Nigerian Council for Management Development (NCMD), and the Administrative Staff College of Nigeria (ASCON) later followed). Before the establishment of ITF, NCMD, and ASCON, Nigeria had over the years formally sought solution to the problem of skills acquisition through vocational and technical training in the trade centers and technical Colleges. Less attention was paid to informal system of AT in various sectors of the economy until 1987 when extreme youth unemployment problem led to the creation of National Directorate of Employment (NDE). This body was created and solely charged with the mandate to create jobs through impartation of employability skills to unemployed adults in Nigeria. NDE trains unemployed youths and retired persons for Vocational Skills Acquisition, Entrepreneurship or Business Development, Labor Based Works, Rural Employment Promotion. NDE also offers Job placement guidance and counseling to unemployed persons. However, it does not play supervisory role to other apprenticeship training outfits.
**Conceptual Framework of the Study**

This conceptual framework was developed with the intent to demonstrate the paper's thinking and assumptions on the a-priori expectation of the inter-play of government regulation variables in AT and the construction industry AT practices together with the AT outcomes in the industry.

Stage 1 of the conceptual framework depicts physical reality of unregulated construction industry AT scheme. Under such condition, firms have no legal obligation to establish AT programs. Many companies in the industry may not have AT on their corporate policy. Where AT featured in the corporate policy, firms may set up AT programs along varying
terms and conditions for the scheme in the absence of codified regulation. Such differences may likely reflect on the quality of the trainees produced at the end of the day. Significant difference in the skills competency of the trainees from various firms in the industry will create inter firms employability problem for successful trainees in the industry. However, when the government intervenes in AT program by establishing practice standards as in stage 2; the industry's AT environment will become crystallized and relatively homogenous. The model hypothesizes that regulation of AT practices in the construction industry will provide several benefits as identified in the third stage in figure 1 above. The benefits will include but not limited to: better skills training outcome, increase stakeholders’ participation and enhance the trainees' employability.

Research Method

The study combined primary and secondary data for analysis. On one hand, the study relied on a previous study by Asghar and Siddi (2008) from where data on Pakistan was drawn for comparison. While on the other hand, empirical study of AT practices in Nigeria was carried out through a cross sectional survey approach, details of which are provided below after the explanation of the reason for selecting Pakistan and Nigeria for this study.

Why Choose Nigeria and Pakistan?
The study compared Pakistan with Nigeria because of the similarities between the two countries. Both countries are developing economies in which the military ruled for most parts of 80s and 90s. The two are commonwealth countries operating dual systems of formal vocational education and technical training in addition to apprenticeship training. Finally, each of the countries has approximately the same population size of about 160 million people.

International comparison of this nature in construction industry apprenticeship schemes in different countries allows comparability and deepens understanding of the challenges of individual country's construction sector within the context of its own peculiar economic development characteristics. Moreover, cross border studies of this nature provide aggregation of data across two or more countries to be used in policy formulation process. Results of the comparison will paint a global picture of the industry's apprenticeship training situation, which may serve as a basis for developing international policies on improvement of labor skill acquisition programs in the construction industry through AT.

For Nigeria, a self administered questionnaire instrument posing common and related set of questions to those identified in Pakistani study were adapted to the Nigerian environment and used in conjunction with scheduled interviews to elicit empirical data from the respondents.

Data Gathering Procedure and Sampling

Membership registers of Architectural Firms, Building Contractor Firms and Registered Contracting Firms were used as the sources of the population for this study with a focused on the Lagos based members. The choice of Lagos hinged on the fact that from the membership records, over 85% of the members of each of
the three registered professional bodies (viz. Contracting Firms = 196, Architectural Firms = 207, and Building Contractor Firms = 108) operating the construction industry of Nigeria are located in Lagos.

Stratified Random Sampling procedure was employed in the respondents from membership record of the three professional groups earlier identified. Members of the three groups operating in the construction industry in Nigeria aggregate 511.

A sample size of 171 representing (33%) of this study population was drawn for this study population and is considered adequate to significantly represent statistically the behavior of the entire study population. Out of the 171 questionnaires that were administered, 162 sets were retrieved and screened, while analysis for this study was based on 123(71.9%) properly answered questionnaire sets.

The data gathering instrument was structured on a four points Likert Scale coded: Strongly Disagree (1), Disagree (2), Agree (3), and Strongly Agree (4) for the scaled questions, while Yes or No categorical answers were subsequently transformed to scaled response using the values (1) for No and (2) for Yes.

The questionnaire was divided into two sections. Section A elicited Background information of the respondents firms/individuals. While Section B focused on collecting information on the following variables: firms' procedures for recruiting apprentices, specific trades in which apprenticeship training is offered, the administrative standards and regulations guiding the operations of apprenticeship training in the industry, as well as the legal framework upon which this important skills acquisition training is anchored were some of the variables investigated in this study. Other important variables also considered in the study includes: training approach used, vertical career mobility prospects, method of assessing trainee's performance, and the mode of funding apprenticeship training program in the industry.

The Descriptive analysis was used to obtain frequencies, percentages and ranked mean score values from the data. The final result is then compared with the Pakistan experience to arrive at the paper findings.

Results and Discussions

In this section, the paper offers a useful insight into the existing AT practices among construction firms in Nigeria. The findings present existing realities of AT environment in the industry along the lines of the study objectives which are to identify the legal and regulatory frameworks upon which construction industry AT practices rested in Nigeria and Pakistan; assess the length of time spent in AT schemes in the selected countries; examine the source/s of AT funding in the two countries; investigate whether AT in one company actually avails employment opportunities to the successful trainee in other companies in the industry; and also ascertain the nature AT certification in practice and the extent educational value accorded to AT certificates in formal vocational skills system.
meant to regulate AT practices in Construction Industry. Virtually none of the respondents is aware of any official regulation which mandates construction firms to establish AT scheme in the industry. 121(98.4%) are not aware of any such statutory requirement. Next, the study used 3-time frames namely; maximum training duration, minimum training duration, and similarity of training durations in the same skill trade in sampled companies to analyze the time element involved in AT programs in the industry.

Table 1. Responses on AT Laws and Regulation in Nigeria

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of Apprenticeship law English Labour Code 1946 in Construction Industry</td>
<td>Yes 119(96.7%)</td>
<td>No 4(0.3%)</td>
</tr>
<tr>
<td>Awareness of other secondary AT Laws and their use in Construction Industry e.g. (1971 ITF, 1986 NDE, etc)</td>
<td>Yes 114(92.7%)</td>
<td>No 9(7.3%)</td>
</tr>
<tr>
<td>Awareness of Responsible Departments/Agencies Regulating AT ; ITF,NDE</td>
<td>Yes 109(88.6%)</td>
<td>No 14(11.4%)</td>
</tr>
<tr>
<td>Awareness of laws compelling Construction Companies to establish AT scheme</td>
<td>Yes 2(1.6%)</td>
<td>No 121(98.4%)</td>
</tr>
</tbody>
</table>

In table 1 the responses gathered from empirical survey shows that AT in the built environment sector in Nigeria is largely resting upon extant English Labour Law Code 1946. This view is supported by the fact that 119 respondents representing 96.7% of the interviewed sample size claimed awareness of this law in the industry. The respondents also acknowledged the awareness of other later day AT related laws such as Laws which established ITF and NDE in 1971 and 1986 respectively, however, a larger proportion of them 114 (92.7%) also accepted that ITF and NDE laws were not meant to regulate AT practices in Construction Industry. Virtually none of the respondents is aware of any official regulation which mandates construction firms to establish AT scheme in the industry, 121(98.4%) are not aware of any such statutory requirement. Next, the study used 3-time frames namely; maximum training duration, minimum training duration, and similarity of training durations in the same skill trade in sampled companies to analyze the time element involved in AT programs in the industry.

Table 2. Length of Time Spent in AT schemes in Construction Industry in Nigeria

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of minimum Training Duration in AT</td>
<td>SA 1(.08%)</td>
<td>A 3(2.4%)</td>
</tr>
<tr>
<td>Aware of maximum Training Duration in AT</td>
<td>SA 3(2.4%)</td>
<td>A 5(4.1%)</td>
</tr>
<tr>
<td>Aware of Uniform Training Duration in similar trades across firms in the industry</td>
<td>SA 0(0%)</td>
<td>A 2(1.6%)</td>
</tr>
</tbody>
</table>
The statistical information in Table 2 shows the complete absence of known minimum and maximum durations for AT in construction industry in Nigeria. A total of 119(96.7%) of the respondents are not aware of any minimum AT duration, while another 115(93.4%) say no maximum AT duration exists for the companies in the industry to follow. Again, an overwhelming majority 121(98.4%) of the respondents also confirmed the lack of uniform training durations even in similar trades across the various firms in the industry. The next variable investigated in this study is the mode of funding AT in construction industry, the result of which is presented in table 3 below.

### Table 3: Mode of Funding AT schemes in Construction Industry in Nigeria

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT Funded by Company</td>
<td></td>
<td>89(72.4%)</td>
<td>34(27.6%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>123(100)</td>
</tr>
<tr>
<td>AT Funded by Trainee</td>
<td></td>
<td>1(0.8%)</td>
<td>1(0.8%)</td>
<td>14(11.4%)</td>
<td>107(87%)</td>
<td>123(100%)</td>
</tr>
<tr>
<td>AT Funded by Government</td>
<td></td>
<td>3(2.4%)</td>
<td>5(4.1%)</td>
<td>37(30%)</td>
<td>78(63.4%)</td>
<td>123(100%)</td>
</tr>
<tr>
<td>AT Tax Relief Exists</td>
<td></td>
<td>4(3.3%)</td>
<td>6(4.9%)</td>
<td>78(63.4%)</td>
<td>35(28.6%)</td>
<td>123(100%)</td>
</tr>
</tbody>
</table>

Table 3 presents empirical findings from Nigeria concerning the how AT schemes are funded in the construction industry in Nigeria. The table revealed that construction firms in Nigeria like their counterparts in Pakistan are exclusively responsible for the cost of apprenticeship training in the industry, this position was indicated by all the respondents 123(100%) with 89(72.4%) of them agreeing perfectly to the proposition.

Furthermore, the table indicated that apprentice trainees do not bear the cost of the training program, 121(98.4%) maintained this stand.

Contrary to the submissions of Asghar and Siddi (2008) that companies in Pakistan are compensated with tax relief benefit for AT expenditures, all the respondents in Nigerian study confirmed the absence of any form of AT expenditures compensation to construction companies in Nigeria. Over 113(91.2%) of the respondents disagreed that the Government pay part of the apprenticeship training costs to the firm, only a handful of 10(8.1%) said it does. Again, 95.1% of the respondents did not agree that the government pays allowance / stipend to apprenticeship Trainees, while an insignificant 4.9% agreed.

Finally, 91.9% disagreed that the Government offers Tax Relief package to the construction industry for apprenticeship training schemes. However, it is equally important to note that on this funding issue that apprentice trainees in no way bear the cost of the training program.
Table 4: AT Employability Prospects within and outside the AT Organisation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
</tr>
<tr>
<td>Career Prospect Limited to AT Company only</td>
<td>1(0.8%)</td>
<td>6(4.9%)</td>
</tr>
<tr>
<td>Career Prospect includes Movement to Higher Positions in Other Firms</td>
<td>60(48.8%)</td>
<td>62(50.4%)</td>
</tr>
<tr>
<td>AT Certificate aids Further Studies</td>
<td>0(0%)</td>
<td>4(3.3%)</td>
</tr>
</tbody>
</table>

Table 4 shows the results of analysis of the data from the respondents as regards career opportunities available to successful apprenticeship trainees in Nigerian construction industry. Majority of the respondents 116 (94.3%) agreed that successful apprentices are not only limited to employment opportunity in the firms in which training took place. Another large portion of the respondents confirmed that, successful AT program exposes the Trainee to the prospects of rising to higher positions beyond Craftsman position.

Table 5: AT Certification and Further Advancement in Formal Technical Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT Cert Accepted for Further Tech. Education</td>
<td>89(72.4%)</td>
<td>34(27.6%)</td>
</tr>
<tr>
<td>AT Certification Mandatory</td>
<td>1(0.8%)</td>
<td>1(0.8%)</td>
</tr>
</tbody>
</table>

The perception of the respondents concerning AT certification and the opportunity for further technical training particularly in a formal setting is very glaring. Almost with one accord 119(96.7%) agreed that AT certificates are not recognized as entry requirement for further technical studies in formal institutions.

Lastly, the responses presented in table 5 revealed that in the views of vast majority of the respondents 121(98.4%) that no statute demands mandatory AT certification in AT programs in Nigeria.

In order to further crystallize the discussions of the result to make for the ease of comparison and clearer understanding of the AT conditions in the construction industries in the two countries, the Nigerian empirical findings are now set out in Table 6 in a comparative tabular format that match Nigerian findings with those of Pakistani settings in Asghar and Siddi (2008).
### Table 6: Comparative Check List of Construction Industry Apprenticeship Training Practices in Pakistan and Nigeria

<table>
<thead>
<tr>
<th>Variable</th>
<th>Status</th>
<th>Pakistan</th>
<th>Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment of Apprentice Training Program</td>
<td>Mandatory</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td>Funding of Apprentice Training Program</td>
<td>Solely by Firm</td>
<td>Solely by Firm</td>
<td></td>
</tr>
<tr>
<td>Tax Relief to Firms that established Apprenticeship Training Program</td>
<td>Available</td>
<td>Not Available</td>
<td></td>
</tr>
<tr>
<td>Central Supervisory Body</td>
<td>Provided</td>
<td>Not Provided</td>
<td></td>
</tr>
<tr>
<td>Minimum Duration of Apprenticeship Defined for each Trade</td>
<td>Provided</td>
<td>Not Provided</td>
<td></td>
</tr>
<tr>
<td>Maximum Duration of Apprenticeship Defined for each Trade</td>
<td>Provided</td>
<td>Not Provided</td>
<td></td>
</tr>
<tr>
<td>Certification Required to Practice Trade</td>
<td>Yes</td>
<td>\No</td>
<td></td>
</tr>
<tr>
<td>Apprenticeship Training offers Career Mobility Prospect</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Conclusion

Based on the enumerated findings of this study, the paper concludes that AT practice in the construction industry in Nigeria rests upon weak legal framework, and poor regulatory infrastructures. This phenomenon gives room for most of the AT operating companies to organize this vitally important skills transmission avenue in any manner that appeals to each organization. In fact some of the firms are hiding behind this legal and administrative lacuna to sometimes handle AT practice with levity since there is little or no incentives given to AT operators by the public authorities. In effect, Nigeria has not utilized AT system to address the problem of youth employment.

### Recommendations

This study recommends as follows: Government should enact laws to regulate apprenticeship training in Nigerian construction industry for uniformity of practice and better commitment by all stakeholders in order to achieve better training outcome. Such regulatory framework needs to provide industry benchmarks for training duration, knowledge content, mode of training indicating minimum ratio of basic relevant off-the-job theory and on-the-job practical. It should further prescribe mode of funding in which the government partakes in training cost, and sets uniform standards for certification in similar trades across the industry. Government can
utilise nationally regulated AT programme in construction industry as a robust platform for solving mass youth unemployment problem in the country. In order to realise this aspiration, the Government should through appropriate legislation, mandate certain classes of construction firms in Nigeria to establish AT schemes. The government should create adequate incentive to entice construction companies to set up good AT programs while prescribing appropriate sanctions against establishments that fail to comply with AT regulations.

References


