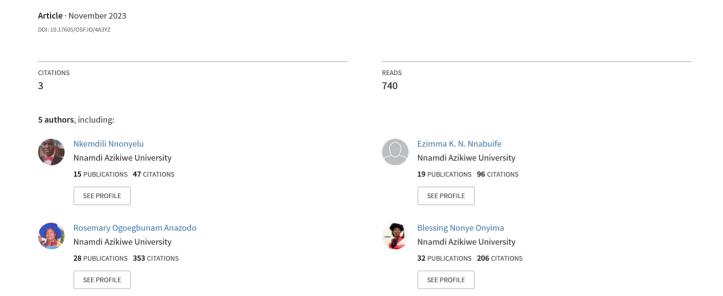
IGBO APPRENTICESHIP (Igba Boyi) AS EXEMPLAR OF INDIGENOUS AFRICAN ENTREPRENEURSHIP MODEL



International Journal of Management (IJM)

Volume 14, Issue 4, May-June 2023, pp. 257-271, Article ID: IJM_14_04_014 Available online at https://iaeme.com/Home/issue/IJM?Volume=14&Issue=4 ISSN Print: 0976-6502 and ISSN Online: 0976-6510

DOI: https://doi.org/10.17605/OSF.IO/4A3YZ







IGBO APPRENTICESHIP (Igba Boyi) AS EXEMPLAR OF INDIGENOUS AFRICAN ENTREPRENEURSHIP MODEL

Nnonyelu, N. Au.; Nnabuife, E. K.; Onyeizugbe, C. U.; Anazodo, R. and Onyima, B Nnamdi Azikiwe University, Awka, Nigeria

ABSTRACT

Igbo apprenticeship (igba boyi) is recently receiving rave reviews in the literature given its success rate in the transgenerational reproduction of successful indigenous entrepreneurs. The paper draws extensively from a 2021 study of Igbo apprenticeship in the Onitsha market, arguably the largest market in West Africa, showing how indigenous entrepreneurship has been boosted by the apprenticeship scheme. Studies on indigenous entrepreneurship have shown that the products of the Igbo apprenticeship scheme show greater dexterity in managing their businesses, are more resilient and evince significantly better results. The paper highlights the nexus between the Igbo apprenticeship scheme and entrepreneurship. The paper seeks to unpack the enablers of Igbo apprenticeship, and why it is largely seen as the poster face of local Igbo entrepreneurs. The paper makes a case for the scalability and adoption of the igba boyi indigenous entrepreneurial model as a vehicle for the development and sustenance of indigenous entrepreneurship practices for African development.

Keywords: Apprenticeship, *Igba Boyi*, Entrepreneurship, Indigenous, apprenticepreneurship

Cite this Article: Nnonyelu, N. Au.; Nnabuife, E. K.; Onyeizugbe, C. U.; Anazodo, R. & Onyima, B., Igbo Apprenticeship (*Igba Boyi*) As Exemplar of Indigenous African Entrepreneurship Model, International Journal of Management (IJM), 14(4), 2023, pp. 257-271

https://iaeme.com/Home/issue/IJM?Volume=14&Issue=4

INTRODUCTION

South East and parts of South-South Regions, Nigeria are inhabited largely by the Igbo speaking peoples, who have variously been described as naturally industrious and enterprising (Meagher, 2009) and ingenious in business and commerce (Adeola, 2021; Nnonyelu & Onyeizugbe, 2020).

Explicating further the acclaimed notion of Igbo ingenuity, Kate Meagher observes that while there is no doubt that the Igbo have faced systematic exclusion from the most important positions in the state and the formal economy, Igbo traders, artisans and business people have achieved legendary success in the informal economy (Meagher, 2009).

Amongst the Igbo, the apprenticeship scheme commonly called *igba boyi*- the most evident manifestation of Igbo ethnic entrepreneurial behaviour is currently receiving some attention in the literature (Nnonyelu, Nnabuife, Onyeizugbe, Anazodo & Onyima, 2023; Adeola, 2021; Agu & Nwachukwu, 2021; Igwe, Newberry, Amoncar, White & Madichie, 2018). This new interest in the Igbo apprenticeship scheme is in part a reaction to the rising unemployment, stifling effects of multi-dimensional poverty and the increasing waves of criminality. The scarcity of government employment (*olu oyibo*) or white-collar jobs has provided the gravitation towards embracing the apprenticeship scheme. This crisis situation is equally prevalent in most parts of Sub-Saharan Africa making the call for an embrace of homegrown African entrepreneurship models timely.

The Nigerian situation is compounded by the high rate of out-of-school children, the obsolescence of skills, or the mismatch of skills for those who managed to have the benefit of Western education. Idleness, which in the past was severely rebuked is now an acceptable practice swelling the ranks of those who are not in any employment. To overcome these attendant challenges is a reliance on the proprietary rights of the family, nuclear and extended, and the support they render to their members. Familyness and family cohesion, Igwe et (2018) observe have been central to Igbo entrepreneurial success. The usually brandished egalitarian, republican spirit and individualistic tendencies of the Igbo are not supplanted by this overarching influence of community and family but reinforced by it. This is further buttressed by the promotion of Igbo trade and businesses along the lines of sub-ethnic and communal identities where different trades and professions are delineated and dominated by specific Igbo communities (Madichie & Nkamnebe, 2010; Madichie, Nkamnebe & Idemobi, 2008). The socio-cultural milieu, the background or setting is important in deconstructing Igbo apprenticeship. As Gowlland (2014) has correctly surmised, apprenticeship is not simply an educational context in which learners acquire technical skills, but a learning environment in which world views, ethical engagements and moral values in particular related to work, work identities, class, gender and the place and role of skilled workers in society are shaped as part and parcel of the process of learning (p.760)

In the context of the national financial crisis, in the face of severe difficulties in the Nigerian socio-economic environment, the Nigerian federal government recently held a National Skill Summit under the auspices of the Industrial Training Fund towards bridging the gap between theory and hands-on learning and reducing runaway unemployment. On the heels of that summit, an idea that has refused to go away even in official, governmental circles, is the increasing relevance of indigenous entrepreneurship, which in the case of the Igbo, is largely fuelled by the apprenticeship system known as *igba boyi*. This apprenticeship scheme is described as the largest business incubator globally (Neuwirth, 2017 cited in Adeola, 2021). It is therefore apposite that in understanding indigenous African entrepreneurship, we should give more attention to unravelling the trajectory, meaning, essence and practice of *igba boyi as a model*. That is what our paper sets out to do. What is *igba boyi*? What are its distinguishing features? What are the enablers and sustaining pillars of the Igbo apprenticeship scheme, and to what extent is the practice of Igbo apprenticeship transferable to non-Igbo communities, scalable to other countries in Africa and beyond?

Experiential Learning Theory (ELT) and the Social Learning Theory (SLT)

The whole idea of apprenticeship, even its raison d'etre, revolves around the dissemination of knowledge, the transference of skills from one person to the other. It is in this context that the theoretical persuasions that will help illuminate the concept of apprenticeship shall be situated. Among the relevant theories is the Experiential Learning Theory (ELT) developed by Kolb. Experience is key, as we say commonly, it is the best teacher.

For enterprises that have grown over time, it is the criticality of the owner or master's experience which is expressed in the level of knowledge he/she possesses that is used as a guiding light for the apprentice learner to follow. It was Kolb's insistence that what further reinforces experience is the incremental knowledge that one builds upon in taking decisions. Apprenticeship training has been observed to proceed from observation, imitation, and trial and error to coming up with the best practice in the light of what has been demonstrated experientially (Cope, 2005).

Similarly, Albert Bandura has provided an incisive theoretical premise which is a forerunner of the Experiential Theory propounded by Kolb. Bandura (1977) asserts that in a learning environment, new patterns of learning can be acquired through direct experience or observing the behaviour of others. The significant other, whose behaviour, that the learner looks up to, and is influenced by it, is seen as a model to follow. Within the framework of Social Learning Theory (SLT), Bandura (1977) observes that people not only observe in the process of learning, but they take note of the differential outcomes following their different actions. Where they are favourable, they have strong incentive motivational effects. The Igbo Entrepreneurship domain has a father figure, the master craftsman, who is the custodian of fungible knowledge, and whose possession of awe-inspiring ideas about the craft/trade is hugely respected by those under him who are ever ready to copy however from the master.

METHODOLOGY

The paper is essentially a theoretical review of the literature on Igbo apprenticeship. It draws largely from a 2021 survey of Igbo traders in Onitsha markets spanning four local government areas in Anambra State, carried out by Nnonyelu, Nnabuife, Onyeizugbe, Anazodo & Onyima (2023) that utilised concurrent mixed method involving both qualitative and quantitative approaches. However, using a critical analytical approach, this paper draws from the empirical evidence from the above study and relevant literature to create an understanding of the essence and practice of *igba boyi as an entrepreneurship model*, its distinguishing features as the enablers and sustaining pillars of the Igbo apprenticeship scheme, and also explicate the extent to which the practice of Igbo apprenticeship transferable to non-Igbo communities, scalable to other countries in Africa and beyond.

UNDERSTANDING APPRENTICESHIP

Broadly speaking, apprenticeship is seen as a well-organised, long-term training for a recognised occupation, occurring within a site, under the guidance and supervision of an independent craftsman, which is regulated by a formal contract, and subject to codified criteria (ILO, 2017). Apprenticeship commences when a skilled worker (SW) or a master craftsperson (MC) agrees to train an inexperienced worker seeking to acquire skills (ILO, 2022). Apprenticeship is seen as a distinct form of vocational training that intersperses job learning and school-based education with a view to garnering needed competencies and other work-related knowledge circumscribed by law and predicated on written employment contracts with all rights, privileges and duties incorporated (UNESCO, 2015). The foregoing characterisation symbolises largely formal apprenticeship and does not adequately capture the true essence of what *igba boyi* means.

Informal apprenticeship, found more in informal economies, refers to the system by which a young person undergoes tutelage in the hands of an experienced craftsperson, where the young learner acquires the relevant skills for a trade or craft in a micro, small or medium enterprise (ILO, 2022; Gonnon, 2012).

Igbo apprenticeship is an informal relationship where a young person, a novice, usually a male (nwa boyi) is engaged by an older person (oga) who possesses specialised knowledge in trade or commerce or other crafts, to undergo a period of training for a specific number of years (3-10) after which, he is certified as competent, knowledgeable and trustworthy to start his own business (Nnonyelu et al, 2023; Ekesiobi & Dimnwobi, 2021; Iwara, 2021; Agu & Nwachukwu, 2020). The relationship between the *Oga* and *nwa boyi* (Master and Apprentices) does not end with the release of the new informal graduand into the world of business, trade and commerce, as this master/apprenticeship relationship continues thereafter in a new form. It is a lifelong experience. However, it is important to clarify that in defining and conceptualising the igba boyi apprenticeship scheme, we should separate neatly the different types of apprentices or apprenticeships within the domain of informality. There is a world of difference between igba boyi (apprenticeship) and imu ahia (learn a trade) as they do not strictly speak or connote the same thing, and should not be used interchangeably (as been done by Oyewunmi, Oyewunmi & Moses, 2021). Those who pay fees to learn a trade or craft are not umu boyi (apprentices) in the strict sense of that select category, but within the Igbo the business environment is rather classified as imu ahia (learn a trade through payment) or imu olu aka (learn a craft). These are rather mature, grown-up adults, who may have completed secondary or even university education, but owing to various reasons would seek to learn a specific skill in furtherance of mastering a particular trade or craft. They are therefore required to pay monetarily to acquire that knowledge, and this usually carries a shorter duration. In this case, those who pay to learn a trade neither live in the residence of the master nor perform domestic chores. Igba boyi is not igba odibo (slave and slavery) that conveys the repulsive notions of servitude and servility, or one who does not have rights and privileges like nwa boyi, or imu ahia. For the odibo (slave), it's about duties and responsibilities, and thankfully this has become extinct in Igbo business and social environment.

FEATURES OF IGBO APPRENTICESHIP

A) Cultural Inspiration and Orientation. Our thesis on Igbo entrepreneurship has a lineage to the cultural foundation which is reinforced by earlier studies on entrepreneurship that recognise the primacy and sensitivity of the cultural environment (Igwe et al, 2018; Ajekwu, 2017). The apprenticeship system is deeply rooted in the culture of the Igbo people. It is the cultural background and philosophy of *igwe bu ike* (unity is strength) (Kanu, 2020), or *onye aghana nwanne ya* (be your brother's keeper, carry your relative along) that may have led Adeola (2021) to assert the Igbo indigenous entrepreneurial orientation, uncommon attributes and qualities in the arena of business, give them the unique identity as pacesetters in indigenous entrepreneurship. Therefore, the repertoire of business knowledge and skillsets are deeply rooted in Igbo Sociocultural attributes (Kanu, 2019).

This is amply supported by ILO (2022) when it notes that apprenticeship is much more than an individual contract between a learner and a workplace trainer. It is a training system embedded in local norms and traditions, utilising enforcement mechanisms that involve kinship and the wider community. This brings to the fore the dominance of the kin-related apprentices (*umu boyi*) and the emerging non-kin-related (apprentice that is becoming noticeable (Nnonyelu et al, 2023). It is therefore the extant social norms and values, in communities and families that largely influence the operations of the Igbo apprenticeship scheme.

This is buttressed by ILO (2022) observation concerning informal apprenticeship to wit, they are not defined by law or formally established rules. The family, nay the community held sway in traditional Igbo apprenticeship.

The Igbo are culturally homogenous with extended families playing pivotal roles in the transformation of the wellbeing of family members (Igwe et al. 2018). This cultural nexus serves to arouse and replicate citizenship awareness and responsibility that the Igbo Entrepreneurial Incubation Scheme (IEIS) as Nnonyelu et al (2023) aptly dub it, becomes a sustainable model for business startups and indigenous entrepreneurship (Ezenwakwelu, Egbosionu & Okwo, 2019. This is further corroborated by the observations of Williams, Zorn, Russell & Combs (2013) when they observed the influence of transgenerational cultural forms in family-owned firms. While it is true that the Igbo have embraced indigenous apprenticeship since precolonial times, it was, however, the traumatic and challenging effects of the Nigerian Civil War that practically shut out the Igbo from the Public Sector (Meagher, 2009; Anthony, 2002; Brautigam, 1997), and drove them into leveraging upon the old igba boyi scheme as a way of moving significant portions of families out of poverty. Their collective sense of immiseration, the common experience of discrimination, the palpable sense of loss and the shattering of hopes for individuals and communities across Igboland after the war ignited the community spirit of those who had started some businesses, soon after the war to return from their places of abode to their villages and communities, where they took, with the consent of the families, young persons as apprentices or *umu boyi*. These successful entrepreneurs became role models in the communities, and therefore, it was not problematic for suffering families, to happily agree to let one (some) of the young persons on a voyage of self-realisation, family survival and renewal. Throughout their history, Meagher (2009) observes, cooperation across communal and ethnic cleavages has played a central role in Igbo economic survival and identity formation.

This reinforces the old Igbo philosophy of Aku luo uno, Okwu ebe osi (Wealth and source of wealth is important). Among the Igbo, wealth is respected, and a significant measure of individual and communal success, but only to the extent that its source is known, and falls under the canopy of decent occupational practise. Aka aja aja ga ato mmanu mmanu (Labour now to have prosperity later). The continuous recruitment of young apprentices, and their subsequent settlement in the form of provision of startup capital, and access to wide networks of clients, customers and credit facilities have led to the millions who have utilised the opportunities provided by the Igbo apprenticeship scheme. This individual and communal response to identifying challenges and opportunities has increased the entrepreneurial disposition of ethnic groups (Madichie, Gbadamosi & Rwelamila, 2020). This was very well captured and illustrated by Kanu (2019) in his incisive rendition of apprenticeship as igwebuikenomics. Here, the community is weaponised as a rallying force to help budding apprentices and entrepreneurs. As Kate Meagher (2009, p.35) observed, "What is most striking about the Igbo is their remarkable capacity for institutional innovation across kinship and community lines". The entrepreneurial prowess of the Igbo has long been noticed even in the colonial period and early years of independence.

B) Exclusive Male Endeavour. The most striking feature of the *igba boyi* model, perhaps its Achilles heel, is its male dominance or male exclusivity. It is dominated by males, as the term *boyi* is not gender neutral but refers to the young male and the adjoining responsibilities and expectations of patient service. In Igbo society, there has been a genderisation of social relations given the dominance of patriarchy, where son preference is in vogue. The son is expected to preserve the family lineage, step into the shoes of his father, inherit the family land, and be the custodian of family property (Nnonyelu et al, 2023; Igwe et al, 2020).

In their expansive study of the hub of Igbo apprenticeship – Onitsha market, arguably the largest market in West Africa, the conclave of Igbo business cognoscenti, Nnonyelu et al (2023) revealed that *igba boyi* is a strictly male affair, and the newly emerging phenomenon of sales girls in the markets has not replaced or eroded the functions of the *umu boyi*.

There is no contemplation amongst the Masters (96.6 percent of the respondents) of having *igba geli* (for girls) as a complement to the exclusive *igba boyi* apprenticeship scheme. Sales girls merely record keepers or accounts clerks, who are not schooled in the nitty gritty of the business, or nuances involved, are paid monthly, and have generally not been known to play the role of *nwa boyi*.

C) Co-residency. In the lenses of the stakeholders involved in the Igbo apprenticeship scheme (*igba boyi* model), there are two important sides of engagement namely; i) residence of the master, and ii) the shop, or business premises. Learning the ropes for the young apprentice starts with his arrival at the home of his master, where he becomes indoctrinated as a member of the household performing important domestic even menial tasks. He learns the dos and don'ts of his master's household. This is not dissimilar to the pattern of co-residency in Ghana, as observed by Peil (2012). The success of the young apprentice is directly linked to his willingness to perform domestic chores satisfactorily. He takes instructions not only from his master, the mentor but from the spouse and grownup children of the master (*Oga*), if they are available (Nnonyelu et al, 2023).

The young person is not disoriented, a second time, by a search for accommodation, but finds shelter if not comfort, in the home of his maser or trainer. The master becomes the loco parentis, teacher, mentor, and coach, guiding and supporting the new member of his household (Nnonyelu et al, 2023, p.37).

The mentor takes the position of the parent and therefore has the added responsibility of ensuring the safety of the lad and rendering every assistance that the young person needs to settle down in his new home, learn the necessary domestic chores, as well as the core task that informed his journey, or relocation ab initio. He has to be helped to find time for work in the market, or business premises. Co-residency is therefore inseparable from the igba boyi, as the informal curriculum and pedagogy of delivery embody both the home and the workplace. This co-residency is captured by Lancy (2012) who opines that the master is a repertoire of knowledge and wielder of authority, who accepts the aspirant learner into his abode for training and learning. This is in line with the findings of Nnonyelu et al (2023) who saw the continuum between home and market duties for the apprentice. To understand the full import of coresidency, it is important to draw the attention of the reader to Gowlland's thesis on apprenticeship where it is conceived in terms of duality, on the one hand are those who are involved in Legitimate Peripheral Participation (LPP), identified by their marginal, fringe involvement as novices or newcomers, who take time to get themselves in the new setting, and on the other hand, are those conceived as belonging to a Community Of Practise (COP) and delineated by co-residency and involvement in a set of common practises, increasing their knowledge and expertise over time, and evolving a unique identity.

D) Age of Apprentice and Duration of Apprenticeship. Although there is no consensus on the specific age for apprentices, there is however a groundswell of opinions in the literature that underscore the suitability and preference of young persons as apprentices. In a comparative study of apprenticeships in selected African countries, it is shown that the average age of apprentices stands at 22 years Sudan, 25.2 years in Malawi, 23.5 years in Tanzania, and 21.5 years in Ghana (ILO, 2012), indeed most fall under the age of 19 (Breyer, 2007 cited in ILO, 2022).

However, for Igbo apprenticeship, the most common age category for apprentices are those in the age category of 14 - 17 years, closely followed by those in the age cohort of 18 - 21 years. The average age of *nwa boyi* is 17 years (Nnonyelu et al, 2023; Gessler, 2019). It is evident that there are regional variations in the age categories of apprentices as highlighted by the ILO Report (2022) where the West African Zone evince a preference for younger apprentices unlike what is observed in East and Central Africa.

Our thesis on apprenticeship in Nigeria follows the young person paradigm, with a progression to master status, with time, where the young person drinks from the fountain of knowledge of the master (Gessler, 2019). Similarly, there is also no agreement on the time it will take a new apprentice to go through the rigours of the apprenticeship training. The period of apprenticeship among umu boyi ranges from 1 - 10 years, although for majority of the apprentices, it is from 5 - 8 years (Nnonyelu et al, 2023) (Agu & Nwachukwu, 2020).

Duration or the specific time it will take an apprentice (*nwa boyi*) to go through the training has been largely flexible and lacks standardisation. The probable year of completion of learning depends on the type of trade, craft. Duration is trade and profession specific (Nnonyelu et al, 2023). As in other apprenticeships, experiencing a positive work environment, satisfaction with the quality of training received, enjoying the tasks (Stanwick, Ackehurst & Frazer, 2022) and developing a positive feeling of belongingness in the home of the master is critical to successful completion in good time. In the absence of a codified body of knowledge that serves as the curricula for the different trades in the markets and other crafts (professions), it becomes difficult to have a commonly agreed duration for all apprentices. This is however not different from what obtains in formal schooling, as different academic disciplines and programmes have different years of graduation (Nnonyelu, 2022).

E) Curricula and Pedagogy of Apprenticeship. Central to understanding the relevance of the curricula in Igbo apprenticeship is the totality of concentration of the young person on the content of what he is taught. This is akin to what Tim Ingold (2000) cited in Gowlland (2014), refers to, as, education of attentions, where the master regularly directs the attention of the learner to very important relevant features in the home and work environment. The apprentice must show readiness and calmness to learn, starting perhaps with menial chores. For Lancy (2012) attention is prerequisite for progress in the training of the young apprentice, given its pedagogy which are observation, imitation, practise for improvement of skill and speed, and trial and error. Equally the pedagogy demands that the apprentice learns from his own mistakes, and hereby reduces the frequency of intervention.

The informal curriculum provides the necessary indigenous knowledge backbone that it has received some accolades (thumbs up) in the literature. Onwuegbuzie (2017) observes that with apprenticeship, learning occurs by watching and doing. The more formal classroom learning tends to be mainly theoretical, while prioritising little opportunity for doing. In the apprenticeship system, the apprentice receives both tacit and explicit preparation, which equips the apprentice with the competence required to run a business successfully at the end of the learning period. On the other hand, majority of those who passed through the formal system of education, tend to fail when they attempt startups. This suggests they have not been effectively prepared for this role and may need a stronger component of hands-on learning, which apprenticeship provides (p.281).

It is thus clear that local people are a reservoir of indigenous entrepreneurial knowledge which through apprenticeship over periods of time is transferred from one generation to another. It is this indigenous entrepreneurial knowledge that is given fillip through apprenticeships that forms the bulwark of entrepreneurship which led Nnonyelu et al (2023) to theorise about apprenticepreneurship.

However, it will be illusory to think that the curriculum does not need any finetuning or recalibration to ensure its sustainability and appeal, particularly to the burgeoning millennial age that should form the target participants. Some commentators on apprenticeships are of the view that what obtains is largely inchoate, premised on the whims and caprices of master craftsmen or *Oga* as they are commonly called in Nigeria (Nnonyelu, 2022; FMYSD, 2021; ILO/WB, 2013).

Igbo apprenticeship is particularly rigorous and its practise is reminiscent of the submission by Lancy (2012) in his incisive article "First You Must Master Pain: The Nature and Purpose of Apprenticeship". The different steps are laddered, climbing each gradually demonstrates your competence, loyalty and discipline before stepping up. In the mould of an acolyte, he takes time to understand the trade, operations and secrets.

In looking at pedagogy in traditional apprenticeships, we follow the idea and roles of mentoring as depicted by Bennetts (2002) as a process which could be formally organised and obligatory, or natural and informal. In a traditional apprenticeship model, the mentorship should be hierarchical. However, Rose, Rukstalis & Schuckit (2003) cited in Bourke, Waite & Wright (2014) have ideal type, characteristics of good mentors to include being empathetic, good role model, available, interested and non-judgemental, while mentees on their own part need to be willing to accept criticism, have the ability to set their own agenda, reassess their performance and follow through on mentor suggestions. Kemper, Castro & Bas (1993) noted the distinctive feature of learning under apprenticeship as being well rooted and grounded in practise. Theoretical exposition for Igbo apprenticeship is totally absent except for folklores.

Utilising the theoretical platform of Experiential Learning Theory following Kolb (1984), Onwuegbuzie (2017, p.282) contends as follows

Apprenticeship is an experience building process that allows the apprentice to learn and relearn while on the job. This process allows the individual involved in the apprenticeship process to learn from the experience of the teacher/master and also learn from his or her mistakes while on the job. This form of learning therefore provides hands on skills and abilities that prepare the individual to be more capable of independent replication. This explains how several generations of successful entrepreneurs were created in precolonial times and even till contemporary time.

It is thus the totality of this informal learning process and content with its rigorous demands that led some scholars to aptly dub it the Igbo Business School (Adeola, 2021; Agu & Nwachukwu, 2020) or Igbo Trade Apprenticeship Scheme (ITAS) (Igwe et al, 2018) or Apprenticepreneurship (Nnonyelu et al, 2023). The practitioners themselves refer to it as the alternative university (Nnonyelu et al, 2023).

F) Propensity of Oral Agreements. From precolonial period till date, oral agreements have mostly been the glue that holds the apprentice relationship together, although supported by moral suasion. The commencement of *igba boyi* (apprenticeship) usually commences when a grown-up adult, already adept in his vocation, approaches the family of a young person, usually related kin, in the past (extended family), expresses his willingness to have the young boy come under his tutelage, for a specified period. It is not usually a one-way traffic as the parents of the young boy can commence the discussion and negotiation by approaching a successful adult (usually a member of the extended family), whose vocation and lifestyle are appealing to the family (Olulu & Udeorah, 2018). Pleasantries are exchanged over kola nuts given the fact that known families are involved who leverage on existing social capital – mutual care, affection and trust.

However, the existing law of contract of apprenticeship in the Nigerian Labour Act 2004 Section 50(1) which stipulates that every contract of apprenticeship must be in writing and attested to by an authorised labour officer, before it can be considered as binding is usually ignored. With this vacuous and opaque law on apprenticeship contract, which is clearly separated from the existential realities, it is therefore not surprising that Olulu & Udeorah (2018) view this law as "quite inadequate... and at best mere paper work". The labour law has not sufficiently addressed the issues of violation of agreements, as the rights of apprentices are not well protected.

We note further that during apprenticeship negotiation and placement process, there are certain individuals owing to the position they hold in relation to the would be *nwa boyi* that must be present. The father, as the head of the household is the central figure outside the master (*oga*) that must be present. Where this is not possible, owing to death, then the biological uncle takes the place as a negotiating authority on behalf of the lad (Nnonyelu et al, 2023). In their absence, the older siblings or the extended family step in. The most common provisions in the agreement oral or written is the length of stay, that is, number of years of apprenticeship, the code of conduct of the apprentices (dos and don'ts) and settlement procedures (Nnonyelu et al, 2023). A striking feature of these agreements is the existence of a probation period during which the *nwa boyi* is observed to see his level of preparedness and interest in the particular trade of the master (Nnonyelu et al, 2023).

The fluidity of these agreements in recent times has led to some abuse by some unscrupulous masters (*ndi oga*) who renege on their commitment to their apprentices, an act considered abominable among the Igbo. These masters exploit the flimsiest of excuses not to properly settle their apprentices after several years (Nnonyelu et al, 2023; Nkamnebe & Ezemba, 2021). This behaviour of some masters is usually frowned at, as it deals a fatal blow to the true spirit and essence of the Igbo apprenticeship scheme, which is, the guarantee that successful completers of the programme are sure of taking off in their businesses immediately. Apprenticeship scheme provides a seamless transition from one without job to a creator of wealth.

G) Poor Family Status of Apprentices (Family Background). Another important marker of Igbo apprenticeship is the poor family background of those who go into the apprenticeship as nwa boyi (apprentice). Literature is replete with the poor socioeconomic status of these young persons who take to apprenticeship (Nnonyelu et al, 2023; Nkamnebe & Ezemba, 2021; Adeola, 2021; Agu & Nwachukwu, 2020; Igwe et al, 2020; Madichie et al, 2008). Several of them are from very poor homes, most of them have parents or guardians who are not able to fund their education beyond the primary school level. Successful entrepreneurs who went through the igba boyi scheme do not fail to mention their very poor upbringing, the inability of their parents to send them to school. This situation compelled them, as their families had no other choice, to go into apprenticeship which proved a vehicle, or conveyor belt that gave rise to their uncommon entrepreneurial acumen (Nnonyelu et al, 2023). They could therefore be neatly subsumed under the canopy of necessity entrepreneurs (Global Entrepreneurship Monitor, 2012). It is important in unveiling the dynamics of Igbo apprenticeship to underscore the class dimension of the Igbo apprenticeship scheme. Whose children go into the apprenticeship scheme? The evidence is rife that the poor and the indigent are the class of Igbo people involved in igba boyi (Nnonyelu et al, 2023). It was however the celebrated success of those who were absorbed into the *igba boyi* scheme that eliminated the negative perceptions and changed the narrative to a story of pride. It is however right to observe that among the Igbo, low family status, rather than be a deterrent, is itself a catalyst.

The Igbo belief in hard work, is reinforced by the saying "nwata kwocha aka osolu ogaranya rie nni" (if you work hard, you dine with the wealthy, princes and kings). Moreso, in traditional Igbo communities, credit networks based on the trust system operated across clans (Dike & Ekejiuba, 1990).

H) Existence of Business/Trade Secrets and Language (Slangs). Everyday transactions in the life of the apprentice show a gradual exposure and indoctrination into the business secrets or more precisely, the peculiar trading nuances and business slangs utilized by apprentices (*umu boyi*) and masters (*oga/ndi oga*) (Nnonyelu et al, 2023). Whether as vice or virtue, the truth is the use of business slangs, or other trade secrets and the knowledge of these are open to the apprentice, and these apprentices leverage on this to make a fortune for their masters, and for themselves when they become independent.

However, if the slangs are used to defraud, or cheat unsuspecting customers, and the shop is so stigmatised, this shall negatively affect the business (Nnonyelu et al, 2023). Very clearly, the apprentice is expected to keep the trade or master's secrets and lore, should not be loudmouthed, be on his wit's end, use guile to open the treasure cove and obtain the vital information that underlies the profession or trade (Lancy, 2012).

DISCUSSION

Igbo Apprenticeship as Exemplar of African Indigenous Entrepreneurship

The practice and processes involved in Igbo apprenticeship have largely rested on autochthonous knowledge, or what is commonly referred to in the literature as indigenous knowledge (Ngulube & Onyancha, 2017). Essentially indigenous knowledge is local (Agyemana, Ngulube & Dube, 2019) and it is mostly oral and undocumented (Ellen & Harris, 1996 cited in Agyemang, Ngulube & Dube, 2019). The ensemble of ideas in a local community which builds upon informal experiments through trial and error, without the intrusions of external influences and grows from the dialectical associations represents the fulcrum of the society's knowledge pedestal. Indigenous knowledge is defined by the manner of its development "outside the formal educational system, being embedded in culture, and being unique to a given society (Boven & Murohashi, 2002 cited in Agyemang, Ngulube & Dube, 2019).

It is within this locus of indigenous knowledge and its transgenerational folklore and cultural heritage that Igbo apprenticeship developed. The rise, spread and traction gained over the years by the *igba boyi* system of apprenticeship is its institutionalisation by specific cultural characteristics. Some of these cultural enablers are the philosophy of igwe bu ike (unity is strength) (Kanu, 2020; Kanu, 2019), onye aghana nwanne ya (be your brother's keeper) which is the autochthonous social support system, a symbol of the extended family, and ogo bu chi onye (your inlaw or family relative is your saviour) amongst others (Nnonyelu et al, 2023). The philosophy of nwanne di na mba (your relative is outside your immediate vicinity) is given expression in the ubiquity of Igbo businesses in most parts of Nigeria, and in other places in Africa. The ease with which the Igbo adapt, and see one another, not as a competitor, but one to establish a cooperative relationship with is instructive. The Igbo is itinerant, that is why it is believed that the Igbo are the next most populous in any community or ethnic area in Nigeria, after the host indigenous population. This mobility sustained entrepreneurially by the apprenticeship scheme and more specifically the cultural injunction of *onye aghana nwanne ya*. Leyton (2018 cited in Nnonyelu et al, 2023) opined that fictitious kinship is an anthropological term that refers to the nature of intra/inter group relations which is often experienced by a migrant in urban city centres when they are away from home or blood relatives.

The Igbo itinerant business man does not fail to tap into the fictitious kinship relations in distant land. This has manifested in many markets where Igbo dominate like Alaba International Market, Idumota and Ladipo Spare Parts Market, Ikeja Computer Village to mention but a few in Lagos. It is the exploits witnessed in the Computer Village, Ikeja promoted by the *igba boyi* scheme that Neurwith (2017 cited in Adeola, 2021) described as the largest business incubator globally.

In the mould of the Silicon Valley as a hub of entrepreneurship, this market is a hub of resourcefulness, creative imagination serving as a breeding ground for multiple local entrepreneurs. This is replicated across the country where the Igbo showcase the beauty of the apprenticeship scheme *igba boyi*.

This is evident in the volume of internal remittances that come outside Igboland, and external remittances from the Igbo diaspora, many of them offspring of the *igba boyi* scheme. These remittances run into tens of billions of dollars annually (Nnonyelu et al, 2023).

Indeed, the Igbo apprenticeship scheme, standing in contradistinction to the perception of tenets of capitalism, as being dominated by rational hostility and competition is the unique appetite amongst *ndi oga* to take up responsibility of training an apprentice (*nwa boyi*) through the nitty gritty of their business, equip him with all relevant knowledge, not considering that the young person will grow to compete with him in the same business, and even same locality. This is where the master (*oga*) sees his relationship with *nwa boyi* as a sacred trust, where he is replicating himself. The idea of pro-genetics in Igbo apprenticeship as Nnonyelu et al (2023) have shown, is where the apprentices are produced by the masters as offspring. Although, not biological children, the successful *umu boyi* are a significant source of support to the master, if the vagaries of unexpected rough business weather affect negatively the business of the master. Banks may fail to come to the rescue of collapsing businesses, but the different cohorts of *umu boyi*, always do, as quasi guarantors, or family insurance.

In today's harsh business environment, the different cohorts of *umu boyi* remain, and act as a safeguard to protect and promote their businesses. This is in line with the observations of Agu & Nwachukwu (2020), Oyewumi, Oyewunmi & Moses (2021), Obunike (2016) and Onyima et al (2013). Onwuegbuzie (2017) observes a successful entrepreneurial outcome after a prolonged period of apprenticeship which corroborates the findings of Nnonyelu et al (2023). Igbo apprenticeship leverages on extant social capital (Igwe et al, 2018) as crucial for continuing the apprenticeship relation. On the part of the apprentice, the expectation is that he should be honest, first and foremost, reliable, trustworthy, diligent, patient and show discipline always (Nnonyelu et al, 2023; Madichie et al, 2008).

Igbo apprenticeship has proved to be one of the surest routes, given the local peculiarities in Africa, to becoming successful entrepreneurs. Furthermore, it is in the context of this inseparable relationship that an apprentice is weaned in the womb of entrepreneurial incubation scheme whose outcome is creatively referred to by Nnonyelu et al (2023) as Apprenticepreneurship (*Nkwado Ogaranya*). It is called *nkwado ogaranya* in view of the elaborating practises, the values that influence the institution of apprenticeship and the conduct norms that support it as empowerment process to self-fulfillment. It is a way of life for most *ndi Igbo*.

Onwuegbuzie (2017, p.281) explicitly stated this reality, that "the high unemployment rates experienced in most countries suggest that today's society needs more job creators than job seeks." It is our view that the traditional Igbo apprenticeship and similar local apprenticeships if continuously nurtured and supported, stand to fill the gap. In the face of the failure of current educational systems to produce graduates who are not job seekers but successful entrepreneurs, Onwuegbuzie (2017) says that there is a need to incorporate a stronger apprenticeship component into the formal educational system.

Given the changing environment however, the force of modernisation, the gradual corrosion of the moral fabric of the community, the declining influence of familiness and extended kin groups, and the subtle replacement of the bonds that hold these communities together, there seems to be a noticeable shift in the attraction of the Igbo apprenticeship scheme (Nkamnebe & Ezemba, 2021; Nnonyelu & Onyeizugbe, 2020). Wrong social values driving negative perception may affect the youth passion for, and interest in, apprenticeship and can escalate with negative outcomes on the direction of enterprise and social prosperity (Udu, 2015). Also, as Anggadivita, Ramadani & Ratten (2017) observe in transitional societies, socio-cultural systems weaponize latent qualities and features that impact a person's general wellbeing, industrial potential or passion, perception and general orientation and attitude.

To many Igbo people, apprenticeship (*igba boyi*) is for those from very poor homes without requisite education, who are desperate to have a means of livelihood. They consider it as demeaning to engage in apprenticeship (Nnonyelu et al, 2023). This general perception, or misperception, has been implicated in the general reluctance or cold feet developed by youth nowadays to go into apprenticeship. Others are the place of work or trade, dirty work as Misko, Nguyen & Sanders (2007) characterise it. The millennial generation finds it difficult to go through some of the excruciating and unpleasant experiences, are not willing to follow what Lancy (2012) identified as an acquaintance with pain, or what gym enthusiasts echo as NO PAIN NO GAIN. Perhaps this may be why half of all trade apprenticeships, globally are not completed (Smith & Kemmis, 2013).

Other challenges affecting the Igbo apprenticeship scheme are the notorious lack of state support for the scheme. The governments at all levels in policy and practise have shied away from providing assistance to enable these apprentices and mentors go through the burden of apprenticeship with less stress. This aloofness is in spite of the numerous benefits from the apprenticeship scheme to different stakeholders including apprentices, enterprises and public authorities (ILO, 2017). These benefits include enhanced employability, increased satisfaction and higher social status; marginally higher productivity and quality, wage stability, tax revenue, savings on employment programmes, among others (ILO, 2021, p.14). These benefits stand to contradict the pessimism expressed by some scholars (UNO, 2010) on the irrelevance and impotence of entrepreneurs in developing countries. People value being entrepreneurs for many reasons other than material gains. These are: substantial non-pecuniary returns, provide independence, a positive change in lifestyle, a sense of achievement, of identity and of being accepted. In spite of the drawbacks in the apprenticeship programme, successful entrepreneurs from the scheme move with an aura of social approval.

CONCLUSION

Igba boyi which is synonymous with Igbo ethnic entrepreneurial behaviour has shown great resilience in the face of daunting challenges. Across Nigerian markets, and in many other local industrial sectors, the apprenticeship scheme continues to flourish evolving into new patterns where non-kindred apprenticeships, are emerging. Even non-Igbo persons go through the Igbo apprenticeships through the practise of collaborative endeavours. The products of the Igbo apprenticeship (*igba boyi*) have made significant contributions towards the promotion of African indigenous entrepreneurship through the innovation of many startups, family businesses, small and medium scale enterprises (Nnonyelu et al, 2023; Ezenwakwelu & Okwo, 2019). It is necessary to mainstream quality apprenticeships in national development strategies and in employment, education and lifelong learning policies (ILO, 2021).

The flagship of the Igbo ethnic entrepreneurial behaviour is the market domain. What needs to be emphasized is the unique cultural orientation that gives the *igba boyi* its special flavour, and the successes recorded by the multiplication of thousands of entrepreneurs through the scheme dispersed all over the country and beyond. This is without any support from the state, while the state has benefited in improved revenues from taxation and other contributions to the gross domestic product.

It is all too obvious in the face of dwindling revenue, against the contrary backdrop of increase in population, and the youth bulge in Nigeria, that the state cannot, even in the foreseeable future, provide employment for the teeming populace. Encouraging the informal sector to boost its capacity in order to rejuvenate or reinvigorate the informal apprenticeship system to take these youths off the street is the policy route to follow.

A panoply of incentives and other supports could be provided by government to help increase participation and completion of apprenticeships. Owen (2016) identified these incentives to include; financial, professional development programmes for supervisors, trial mentorships, and advisory programmes for apprentices. For trade apprenticeships, such state support could mitigate the pains of those who fail to get corresponding treatment from some unscrupulous masters. The *igba boyi* apprenticeship environment is unique in many respects given its pervasive informality and the cultural embeddedness.

REFERENCES

- [1] Agu, G. A. & Nwachukwu, A. N. (2020). Exploring the relevance of Igbo Traditional Business School in the development of entrepreneurial potential and intention in Nigeria. *Small Business Research*, 27(2), 223 239.
- [2] Agyemang, B. K., Ngulube, P. & Dube, L. (2019). Utilising knowledge management methods to manage beads making indigenous knowledge among the Krobo communities in Ghana. *South African Journal of Information Management*, 21(1), 1 9.
- [3] Ajekwu, C. C. (2017). Effect of culture on entrepreneurship in Nigeria. *International Journal of Business and Management Invention*, 6(2), 1 6.
- [4] Anggadivita, A., Ramadani, V. & Ratten, V. (2017). Socio-cultural environment and emerging economy entrepreneurship of women. *Entrepreneurs in Emerging Economy*, 9(2), 313 344.
- [5] Anthony, D. (2002). Poison and Medicine: Ethnicity, Power and Violence in a Nigerian City 1966 1986. James Currey.
- [6] Bandura, A. (1977). Social Learning Theory. Prentice Hall.
- [7] Bennetts, C. (2002). Traditional mentor relationships, intimacy and emotional intelligence. *Qualitative Studies in Education*, 15, 155 170.
- [8] Bourke, L., Waite, C. & Wright, J. (2014). Mentoring as a retention strategy to sustain the rural and remote health workforce. *Australian Journal of Rural Health*, 22, 2 7.
- [9] Brautigam, D. (1997). Substituting for the state: Institutions and industrial development in Eastern Nigeria. *World Development*, 25(7), 1063 1080.
- [10] Cope, J. (2005). The entrepreneurial experience: Towards a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373 397.
- [11] Dike, K. O. & Ekejiuba, F. I. (1990). The Aro of South-eastern Nigeria, 1650 1980. A Study of Socio-economic Formation and Transformation in Nigeria. Ibadan University Press.
- [12] Ekesiobi, C. & Dimnwobi, S. K. (2021). Economic assessment of the Igbo entrepreneurship model for entrepreneurial development in Nigeria: Evidence from clusters in Anambra State. *International Journal of Entrepreneurial Behaviour & Research*, 27(2), 416 433.
- [13] Ezenwakwelu, C. A., Egbosionu, N. G. & Okwo, H. U. (2019). Apprenticeship training effects on entrepreneurship development in developing economies. *Academy of Entrepreneurship Journal*, 25(1), p.1-21.



- [14] Gessler, M. (2019). Concepts of apprenticeships: Strengths, weaknesses and pitfalls. In McGrath et al (eds.). *Handbook of Vocational Education and Training*. Springer Nature, 1 34.
- [15] Gonnon, P. (2012). Apprenticeship as a model for international architecture of TVET. In Z. Zhao, F. Raunner, U. Hauschildt (eds.). *Assuring the Acquisition of Enterprise: Apprenticeship in the Modern Economy*. Foreign Language and Research Press, 33 42.
- [16] Gowlland, G. (2014). Apprenticeship as a model for learning in and through professional practise. In S. B. Ilet et al (eds.). *International Handbook of Research in Professional and Practise Based Learning*. Springer International Handbook of Education, 757 779.
- [17] Igwe, P. A., Newberry, R., Amoncar, N., White, G. & Madichie, N. O. (2018). Keeping it in the family: Exploring Igbo ethnic entrepreneurial behaviour in Nigeria. *International Journal of Entrepreneurial Behaviour & Research*, 26(1), 34 53.
- [18] International Labour Organisation (ILO) (2017). Toolkit for quality apprenticeships. Volume I: Guide for policy makers. ILO.
- [19] International Labour Organisation (ILO) (2022). How to strengthen informal apprentice systems for a better future of work. Lessons learned from comparative analysis of country cases. ILO.
- [20] Iwara, I. O. (2021). The Igbo Traditional Business School (I TBS): A SWOT review synthesis. In O. Adeola (ed.). *Indigenous African Enterprise: The Igbo Traditional Business School (I TBS). Advanced Series in Management*, 26, 39 55. Emerald Publishing.
- [21] Kanu, C. C. (2020). The context of Igwebuike: What entrepreneurship development systems in Africa can learn from the Igbo apprenticeship system. *Journal of African Studies and Sustainable Development*, 2(1), 2640 2657.
- [22] Kanu, I. A. (2019). Igwebuikenomics: The Igbo apprenticeship system for wealth creation. *African Journal of Arts and Humanities*, 5(4), 56 70.
- [23] Lancy, D. F. (2012). First you must master pain: The nature and purpose of apprenticeship. *Anthropology of Work Review*, 33(2), 113 126.
- [24] Madichie, N. & Nkamnebe, A. (2010). 51, Iweka Rd., Onitsha: Could this single African address redefine business cluster development? *World Review of Entrepreneurship Management & Sustainable Development*, 6(3), 229 243.
- [25] Madichie, N. O. & Ayasi, K. (2018). Entrepreneurial opportunities and challenges for retired senior military officers in Nigeria. In L. P. Dana, V. Ratten & B. O. Honyenuga (eds.). *Introduction to African Entrepreneurship. Palgrave Studies of Entrepreneurship in Africa*. Palgrave Macmillan.
- [26] Madichie, N., Gbadamosi, A. & Rwelamila, P. (2022). Entrepreneurship and the informal sector: Challenges and opportunities for African business development. In N. Madichie, A. Gbadamosi & P. Rwelamila (eds.). *Entrepreneurship and the Informal Sector: Challenges and Opportunities for African Business Development*. Routledge, Taylor & Francis Group, 1 7.
- [27] Madichie, N., Nkamnebe, A. & Idemobi, E. (2008). Cultural determinants of entrepreneurial emergence in a typical Sub-Saharan African context. *Journal of Enterprising Communities, People and Places in the Global Economy*, 2(4), 285 299.
- [28] Meagher, K. (2009). The informalization of belonging: Igbo Informal enterprise and natural cohesion from below. *African Development*, 34(1), 31 46.
- [29] Ngulube, P. & Onyancha, B. (2017). Conceptualizing the knowledge of indigenous communities using informetrics approaches. In P. Ngulube (ed.). *Handbook of Research on Theoretical Perspectives on Indigenous Knowledge Systems in Developing Countries*, 127 155. Global Hershey.
- [30] Nkamnebe, A. D. & Ezemba, E. N. (2021). Entrepreneurship incubation among the Nigerian Igbo. In O. Adeola (ed.). *Indigenous African Enterprise: The Igbo Traditional Business School (I TBS). Advanced Series in Management*, 26, 27 38. Emerald Publishing.
- [31] Nnonyelu, N. & Onyeizugbe, C. (2020). Reimagining Igbo apprenticeship: Bringing it up to speed with contemporary realities. *European Journal of Business and Management Research*, 5(3), 1-9.



- [32] Nnonyelu, N. Au. (2022). *Apprenticeship and traineeship scheme: Issues and prospects*. [Conference presentation]. Industrial Training Fund (ITF) 2nd National Skills Summit, Abuja, Nigeria.
- [33] Nnonyelu, N. Au., Nnabuife, E. K., Onyeizugbe, C. U., Anazodo, R. & Onyima, B. (2023). Igba Boyi: A Study of the Igbo Apprenticeship Scheme in Onitsha Markets. Adonis & Abbey Publishers.
- [34] Obunike, C. C. (2016). Induction strategies of Igbo entrepreneurs and micro business success: A study of household equipment line, Main Market, Onitsha. *Nigeria Economics and Business Review*, 43 65.
- [35] Olulu, P. M. & Udeorah, S. A. F. (2018). Contract of apprenticeship and employment generation in Nigeria. *International Journal of Scientific Research in Education*, 11(3), 335 344.
- [36] Onwuegbuzie, H. (2017). Learning from the past: Entrepreneurship through apprenticeship for more successful outcomes. *Advances in Economics and Business*, 5(5), 280 287.
- [37] Onyima, J. K., Nzewi, A. N. & Chiekezie, D. M. (2013). Effects of apprenticeship on social capital on on new business creation process of immigrant entrepreneurs. *Review of Public Administration & Management*, 2(3), 1 11.
- [38] Owen, M. (2016). Giving apprentices a say in their future. NCVER.
- [39] Oyewunmi, A. E., Oyewunmi, A. O. & Moses, E. I. (2021). Igba Boyi: Historical transitions of the Igbo apprenticeship model. In O. Adeola (ed.). *Indigenous African Enterprise: The Igbo Traditional Business School (I TBS)*. *Advanced Series in Management*, 26, 13 25. Emerald Publishing.
- [40] Peil, M. (2012). The Apprenticeship System in Accra. Cambridge University Press.
- [41] Stanwick, Ackehurst & Frazer (2022).
- [42] Udu, A. A. (2015). Apprenticeship orientation and performance of micro businesses in Ebonyi State, Nigeria. *International Journal of Business and Management Review*, 3(12), 1 11.
- [43] United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2015). Delivering TVET through quality apprenticeships. UNESCO UNEVOC. International Centre for Technical and Vocational Education and Training. UNESCO.
- [44] Williams, D. W., Zorn, M., Russell, C. & Combs, J. G. (2013). Feeding the touch factors influencing transgenerational intent in family firms. *Family Relations*, 62(3), 415 428.

Citation: Nnonyelu, N. Au.; Nnabuife, E. K.; Onyeizugbe, C. U.; Anazodo, R. & Onyima, B., Igbo Apprenticeship (*Igba Boyi*) As Exemplar of Indigenous African Entrepreneurship Model, International Journal of Management (IJM), 14(4), 2023, pp. 257-271



https://doi.org/10.17605/OSF.IO/4A3YZ

Article Link:

 $https://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_14_ISSUE_4/IJM_14_04_014.pdf$

Copyright: © 2023 Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).



 $\geq \leq$

editor@email.com