

Entrepreneurial Learning in Informal Apprenticeship Programs: Exploring the Learning Process of the Igbo Apprenticeship System (IAS) in Nigeria

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Abstract

This research examines the unique learning process of the Igbo Apprenticeship System (IAS). This approach to the development of enterprises and entrepreneurship, which originated in the ethnic group of communities in the South-eastern part of Nigeria, uses mimetic learning to instil in its participants knowledge and behaviours intended to create a lifelong approach and mindset to entrepreneurship development. This form of mimetic learning predates the mediaeval era and takes place outside formal educational system. Consequently, it largely does not rely on participants having a specific level of educational achievement. Rather it required a long-term commitment to learning from the apprentice, their family and the entrepreneur. The research expands the theoretical understanding of the entrepreneurial learning through an evaluation of an entirely experiential base using the Theory of Planned Behaviour (TPB) as the critical lens to explore the antecedents of entrepreneurial intention and social learning. It evaluates and combines the available evidence into a conceptual framework that shapes the process of entrepreneurial learning as an experiential activity. Qualitative data gathered from entrepreneurs, who were former apprentices and current apprentices, are critically analysed using the illustrative case study and process tracing approach. The research contributes to the extant entrepreneurial learning process literature by identifying, reviewing and synthesizing available research into a conceptual framework that explores the process of entrepreneurial learning as an experiential process. Key issues in entrepreneurship education including the different informal learning process of the IAS and the identification of specific dynamics in the interaction and development of the learners were examined. The paper concludes with novel suggestions on how education may stimulate this learning process.

Keywords: Learning Processes, Apprenticeship, Entrepreneurial Education, Experiential Learning, Entrepreneurial Intention

1.0 Introduction

Entrepreneurship is termed 'complex' by researchers and practitioners alike due to its multifaceted nature. Add to this that the process of learning has been understudied further highlight these complexities (Chen, Wang, and Lu, 2021). Research shows that entrepreneurial learning mostly occurs while 'doing', and then reflecting on the activity (Vogt, Bulgacov, and Elias, 2022; Kassean, Vanevenhoven, Liguori, and Winkel, 2015). Therefore, to fully understand the complex process of entrepreneurial learning, the individual's past and ongoing experiences should be critically considered. This has given rise to a move to understand and promote entrepreneurial learning through the apprenticeship model, which focuses on gaining entrepreneurial skills through experience or mastery (Nnonyelu, 2020). Many countries deploy apprenticeship programmes and are mostly grounded in the underlying principle of 'mastery'. It is believed that mastery is the terminal point of the apprenticeship, with the 'apprentice becoming the master', a process that is developed according to specific historical and cultural contexts (Deissinger, Smith, and Pickersgill, 2006). As Onwuegbuzie, (2017) states, '*apprenticeship is an experience building process that allows the apprentice to learn and relearn while on the job*'. In Nigeria, this process takes a unique form where the apprentices learn by observing and adopting the behaviours of the Oga/master. The experienced is fully immersive, in that the apprentice lives with the Oga and his family, and works with them for the duration of the apprenticeship, which is typically six years, but may be longer (Iwara, Amaechi, and Netshandama, 2019). This form of learning, therefore, can be said to be built upon the tenets of entrepreneurial intention by the individual with the aim of independent replication of the process. Therefore, this paper seeks to answer the questions:

Does the entrepreneurial learning process of the IAS apprenticeship model produce more successful entrepreneurial outcomes in Nigeria?

Can the model of entrepreneurial learning process be adapted and replicated outside the context of the IAS?

The paper is divided into five sections. The first section presents a detailed narrative review of relevant literature, which includes: Entrepreneurial Learning, Apprenticeship Model of Learning and Entrepreneurial Intention. The second section discusses the theoretical framework adopted as the blueprint of this study. The third section outlines the methodological approach adopted, which is the Illustrative Case Study approach, employing the Process Tracing (PT) technique. The fourth section presents and discusses the findings, followed by the final section which presents the conclusion and recommendations.

2.0 Literature Review

Gassler (2020) describes apprenticeships as the oldest form of training in the world of work and business. The practice of apprenticeship, as a means of passing on skills, is believed to predate the medieval era where trade guilds, journey men and craftsmen flourished to ensure that skills were passed on and productive power of labour could be harnessed (Nnonyelu and Onyeizugbe, 2020). This form of mimetic learning often happens outside of the formal education system (ibid).

The concept of the cognitive apprenticeship as described by Collins (1991) is based on the theory of situated cognition (Lave, 1985). From the viewpoint of situated cognition, competence or mastery of an activity, is not gain only through the accumulation knowledge but it is situated in the “web of social relations and human artifacts that define the context of our action” (St Julien, 1991, p261). This shift the focus from knowledge acquisition to learning that happens in situ as individual increases performance through the application of knowledge in the social context of the activity we are examining.

Apprentices therefore are people who commit to work for, or with, others for a period to learn a craft in a specific social context As Nnonyelu and Onyeizugbe (2020) observe, this may or may not involve theoretical knowledge, but it is almost always geared towards a specialist interest or skill intended to earn the apprentice a living. This is entrepreneurial learning.

Entrepreneurial learning (EL) does not have a single universally accepted definition, but it is generally described as a continued process that enable the development of knowledge that it is effective in creating and managing ventures (Politis, 2005). Davenport and Prusak (1993:4) define knowledge in this context as “a fluid of framed experience, important values, contextual information and expert insights that provide a framework for evaluating and incorporating new experiences and information”.

Deakins and Freel (1998) add to this by defining entrepreneurial learning as a process that creates new ventures and continues to build upon knowledge to improve the effectiveness and efficiency of decision making Earlier, March (1991) describes the process of learning inside an organisation as naturally social and takes place through interacting either as groups or individuals or both. Although advances have been made in the understanding of entrepreneurial learning, it is still obscure how entrepreneurs learning process varies from others as they adjust to changing markets (Liguori, Muldoon, and Bendickson, 2020: Wang & Chugh, 2014). The entrepreneurial learning literature also indicates that entrepreneurs who have created start-ups

or involved in venture creation appear to be more effective and successful at managing further ventures and start-ups. If this assertion is true, this paper will examine the extent to which the Igbo apprenticeship system develop in the apprentices the knowledge, experience, entrepreneurial capabilities through learning to start, grow and sustain the venture created. In the same vein, it will seek to identify the special knowledge, expertise and capabilities that the system imparts on the apprentices to become successful entrepreneurs and how the apprentices learn to work in entrepreneurial ways.

The apprenticeship programme is deployed in a variety of forms in different countries, but they are all grounded in the underlying principle of 'mastery' (Nnonyelu and Onyeizugbe, 2020; Boahin and Hofman, 2014.) and mastery is the terminal point, with the apprentice becoming the master (Deissinger, Smith, and Pickersgill, 2006). For example, the European Union provided a region-wide overview of the range of apprenticeship-type schemes prevalent in the 24-EU Member States with the aim of appraising the employability levels of apprentices and improve their labour market transition (European Union, 2012). It is worth noting that the concept of apprenticeship in the EU is company-based training in combination with school-based training schemes, and the apprentices are paid. These schemes are formally contracted, subject to governance and oversight and often lead to a qualification (Haneberg and Aadland, (2020); Nnonyelu and Onyeizugbe, 2020). The Australia apprenticeships also follow a similar model to the EU, and they have traineeships, which are newer and shorter form of the apprenticeship that focuses on the service sector. Both pathways, however, are controlled by the government (Nnonyelu and Onyeizugbe, 2020; Smits, 2006). In contrast, the UK apprenticeship schemes are skills focused and many are linked to university degrees (Smith, Tuck, and Chatani, 2018).

Several studies carried out to investigate the effect of entrepreneurial learning on venture creation pointed to the role of experience, including previous start-ups, as proxies for entrepreneurial learning (Haneberg and Aadland, (2020); Sapienza & Grimm, 1997; Ronstadt, 1988). Other studies indicate that much of the learning that occur in entrepreneurial contexts are practical in nature (Pittaway et al., 2017; Sarasvathy, 2001; Sullivan, 2000). It can be inferred from the findings of these authors that the intricate process through which entrepreneurs learn from past experiences is advantageous to considering the necessity to improve our understanding of entrepreneurial learning to improve entrepreneurial activities. The discussion has moved on significantly from understanding 'what' should be taught to a focus on cognition and 'how' entrepreneurs learn (Santos et al, 2016; Shepherd, 2018).

Notwithstanding this knowledge, understanding how entrepreneurs learn from experience is still quite fragmented, hence the necessity to study new and novel approaches to the learning process. The IAS in Nigeria is a very successful example of experiential entrepreneurship in practice in a developing country. The experiential model developed by Kolb (1984) described a process of knowledge creation through the transformation of experience. Whilst learning on the IAS is neither codified nor mapped against existing frameworks, it nevertheless achieves its purpose. That said, we know that individuals have different learning styles, but what is unclear is how the Oga /Masters in the IAS are able to respond to the individual learning styles of their apprentices. The personal 1-2-1 approach adopted in the IAS may mean that this is more intuitive than planned.

The apprenticeship model operated in developing countries like Nigeria, is mostly informal (Smith and Brennan Kemmis, 2013). These informal apprenticeships are not formally governed, there are no formal contracts and education is not the primary goal. This type of apprenticeship is thought to go beyond the neoclassical conceptions of human capital and the labour market, which view apprenticeship merely as transactional two-party contract, towards an approach that recognises the value of practical, experiential business training system, like the Igbo Apprenticeship System (IAS) with their roots in a cultural and a community (ILO, 2012).

Like Pittaway et al., (2017), Politis (2005), Reuber and Fischer (1999), Bruderl and Preisendorfer (1998) and Kolb (1984), all confirmed that the work experience of entrepreneurs increases the survival rates of their ventures and consequently the likelihood to reduce the failure of the venture. Other researchers, (Duchesneau and Gartner, 1990, Romanelli and Schoonhoven, 2001; Shepherd et al., 2000; Shepherd and Patzelt, 2018) suggest a correlation between the management experience of founders and the survival of their ventures. These studies indicate that prior management experience raises peoples' intention towards venture creation and makes opportunity recognition process easier. Overall, the studies support the view that previous management experience tends to give individuals information about several basic attributes of entrepreneurship that are valuable for recognising and acting on variety of entrepreneurial opportunities.

The apprenticeship scheme is seen as the seedbed of the Igbo's entrepreneurial spirit which aims to foster self-employment and self-sufficiency as a way of life (Chukwuma-Nwuba, 2019). The IAS sees families matching aspiring young entrepreneurs with experienced masters,

who they work side-by-side with, often in micro or small enterprises. The service to be provided by both parties is usually specified at the outset of the relationship. There is sometimes a payment made to the master, but largely it is seen as the binding of a relationship between two families. This practice is widespread and is partly believed to be a major contributor to the region's entrepreneurial reputation. The businesses created through this process, irrespective of where they are located, enjoy a longer life span than most start-up businesses in the rest of the country; it is a model that is clearly working (MG Modern Ghana, 2019; Orugun and Nafiu, 2014; Olutayo, 1999).

2.2 Apprenticeship Model of Learning

The transition from formal or informal training to work or entrepreneurship which is a form of apprenticeship, has a long history. Recent alterations, including the transforming nature of entrepreneurship, the increased use of technology and the changing rhythms in the employment market, influence the apprenticeship journey and its destination. According to Gessler (2019), apprenticeships are the oldest form of training in the world of work and business.

The 2012, the European Union report aimed to appraise the employability levels of apprentices and improve their labour market transition (European Union, 2012). It is worth noting that the EU concept of apprenticeship is on the job (i.e. company-based training) in combination with school-based training schemes, for which apprentices are paid.

The Igbo Apprenticeship System (IAS) sees families matching aspiring young entrepreneurs with experienced masters, who they work with side-by-side, often in micro or small enterprises. The service to be provided by both parties is usually specified at the outset of the relationship. There is sometimes a payment made to the master, but largely it is seen as the binding of a relationship between two families. This practice is widespread and is partly believed to be a major contributor to the region's entrepreneurial reputation. The businesses created through this process, irrespective of where they are located, enjoy a longer life span than most start-up businesses in the rest of the country; it is a model that is clearly working (MG Modern Ghana, (2019); Orugun and Nafiu, (2014); Olutayo, (1999).

3.0 Theoretical Framework – Theory of Planned Behaviour

Engagement in entrepreneurial activity is described as a deliberate and planned behaviour. Hence, entrepreneurial intention (EI) or "intention" can be evaluated using the theory of

planned behaviour (TPB). The TBP is utilised in many disciplines and "predicts and explains behaviour in specific circumstances" (Sabah, 2016), however, it has gained prominence in entrepreneurship research since starting a business is a deliberate and intentional activity that necessitates cognition. Also, the decision-making process is complex and influenced by a number of variables; it is an intentionally cognitive process (Renko et al., 2012). Although entrepreneurial behaviour is a "closer antecedent" for behaviours, focusing on entrepreneurial cognition offers a more significant approach than focusing on personality traits, gender differences in the entrepreneurial process, and firm size (Liñán et al., 2011; Kautonen et al., 2013). The TPB is chosen for this study to investigate the phenomenon of the IAS and the decision of parents/guardians to enrol their children/wards in the program given that intentions orientation is becoming more and more popular in entrepreneurship research (Sabah, 2016; Irene et al., 2021). There are two main factors that influence intention: (a) desirability, or the motivation to engage in specific behaviour, and (b) feasibility of the intended behaviour (Renko et al., 2012). Particularly, the perceived behavioural control (PBC) element of the theory, which combines individual attitudes towards entrepreneurial behaviour and subjective norms, signals feasibility. Personal attitude, which refers to the people's "favourable or unfavourable evaluation of the behaviour in question" (Ferri et al., 2018), also influences behaviour and denotes a personal assessment of the perceived outcome of entrepreneurial intention.

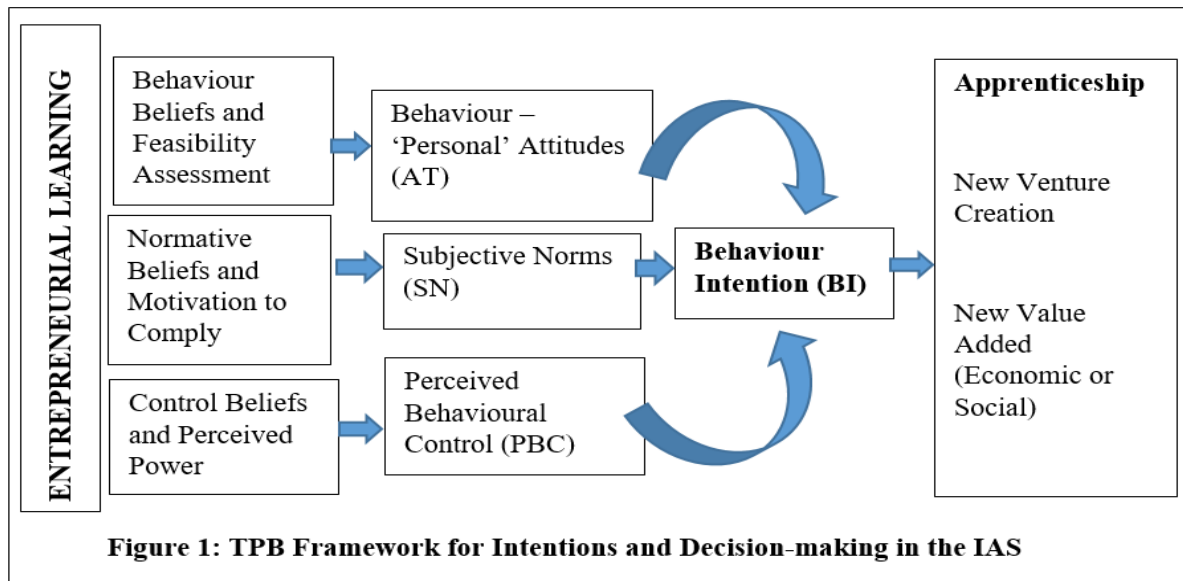
Our understanding of planned behaviour is aided by three conceptually distinct views: (a) behavioural beliefs; (b) normative beliefs; and (c) control beliefs (Ajzen, 2002; Sabah, 2016). In general, "intention" increases when someone has a favourable attitude towards the behaviour, when the behaviour's subjective norms are favourable, and when the person believes they can carry out the behaviour (Carr and Sequeira, 2007). In collectivist cultures like Nigeria, the "significant other" is much more important in determining intended behaviour when dealing with subjective norms. The social pressure known as the "social standard" takes into account what "others" think of the planned behaviour. It depends on the expectation of help from "others," such as parents/Guardians and 'Ogas' in context of the apprentices. The proponents of the "significant other" contend that human behaviour is dynamic and adapts to the attitudes of others around them. The term "significant other" is context-dependent, based on cases and cultures, and varies from person to person (Engle et al. 2010). Prior research has demonstrated a positive relationship between norms and intentions, and it has also been demonstrated that the influence and beliefs of "others" have a significant impact on a person's preparedness and willingness to act in accordance with those beliefs (Tornikoski and Maalaoui,

2019; Ajzen, 2011). Hence, it has been demonstrated that subjective norms are crucial in interpreting intentions, particularly for the parents and apprentices in the sociocultural context of Nigeria.

According to the TPB, an individual is influenced in three different ways by subjective probability or behaviour intention (choice intention) (see picture 2):

- a) A person's attitude (AT) towards taking action or not. This is internal and results from personal judgement and behaviour assessment based on personal views. Evaluation compounded by adoption of these behaviours results in outcomes (intention).
- b) Subjective norms (SN) are outside forces that have an impact on a person's intents and behaviours. These forces include perceived social pressure and expectations that guide the adoption of particular behaviours.
- c) Normative Beliefs or Perceived Behavioural Controls (PBC) show self-awareness and the significance of reference groups in the intention to engage in particular behaviours. It suggests knowledge of available resources, chance recognition, or barriers that may serve as motivators for particular behaviours.

In order to examine the apprentice's "intention" to enrol in the IAS, this research makes use of the concept of the "significant other," where the "significant other" stands in for parents/guardians and social expectations. Nigerian society is characterised by a paternalistic belief system, which is a characteristic of patriarchal societies (Irene et al., 2022). Those in positions of authority over subordinates restrict their freedom and obligations in their ostensible best interests (Irene et al., 2022). A child is entirely under the supervision of the father or guardian, who makes all the decisions in the child's life, including career choices i.e. engagement in the labour market or self-employment. Therefore, the development of entrepreneurial intention and identity is influenced by the subjective norms they observe. Subjective norms are described as perceived social pressures to engage in or refrain from the behaviour" (Ajzen, 2011). There has been much discussion about the important connection between subjective norms and entrepreneurial "intention," (Bruyat and Julien, 2001; Kautonen et al., 2013). The Igbo apprentice views owning a business as desirable, not only for economic empowerment but also as a duty to one's family and the expectations from the society (Irene et al., 2021).



4.0 Methodology

This research utilised the Illustrative Case Study approach that employs the Process Tracing (PT) technique. This technique was chosen because it enabled us to trace causal mechanisms using detailed, within-case empirical analysis of how a causal process plays out in an actual scenario. Process Tracing (PT) can be used for both case studies that aim to gain a greater understanding of the causal dynamics that produced the outcome of a particular historical case, and to shed light on generalizable causal mechanisms linking causes and outcomes within a population of causally similar cases (Beach, 2020). Additionally, process tracing adds analytical value because it makes it possible to draw firm causal conclusions from examining the evidence that a causal mechanism operated in a particular example. However, given that Process Tracing (PT) is a single-case method, it can only be used to draw conclusions about individual cases. To this end, we have chosen to use the illustrative case study which is a descriptive case study that highlight one or more circumstances of an event in order to clarify the situation (Hayes et al., 2015). This use of the illustrative case study and the process tracing techniques adds more depths to our research.

To begin with, we "soaked and probed" the IAS's empirical data and conducted a wide-ranging search of the theoretical literature to find any hints about potential mechanisms of the IAS that might constitute a cause and outcome (Beach, 2020). We then explored how the IAS is born out of a choice and that the entrepreneurial learning process is highly experiential and governed by a behind-the-scenes principle of 'settlement', juxtaposing subjective norms (the Igbo tradition), attitudes and perceived behavioural control. Due to the emphasis on causal

explanations, Process Tracing (PT) enabled more than just providing descriptive narrative account of the IAS program and the expected outcome. Instead, by employing the Process-Tracing (PT) technique, we were able to examine the theoretical causal pathways connecting the cause (IAS programme) and the effects (the Incubator platform and entrepreneurial intention and learning). Therefore, we adopted a deductive approach which is often employed when an empirical correlation between the cause and effect has been found in existing literature but there is uncertainty concerning the mechanism linking the cause and the effects.

We began by conceptualising the causal mechanisms, in this case, the perceived behavioural control of the parents/guardians who enrol their young children/wards into the IAS. We focused on the parts of the tradition and religion which are the mechanisms that are theorised to be necessary for the expected settlement outcome. Next, we developed observable manifestations for each part of the causal mechanism including daily diary entries of some of the entities engaged in the IAS. We then gathered empirical data to see whether these observable manifestations were present or not – the purpose of which was to enable us to make logical inferences (Beach and Pedersen, 2019). Once the causal mechanisms had been conceptualised, the next step was the operationalisation which involved translating the theoretical expectations into specific predictions of observable manifestations present in the case. After conceptualising and operationalizing the mechanism, we moved on to the final step (step 3), which involved gathering empirical data that can be used to draw causal conclusions, updating our confidence in: (a) whether the predicted mechanism was indeed present in the case; (b) whether it functioned as predicted, or (c) whether only some components of the mechanism were present. We concluded from the empirical data gathered that a causal mechanism was present in the IAS case, as shown by the bold lines in figure 2.

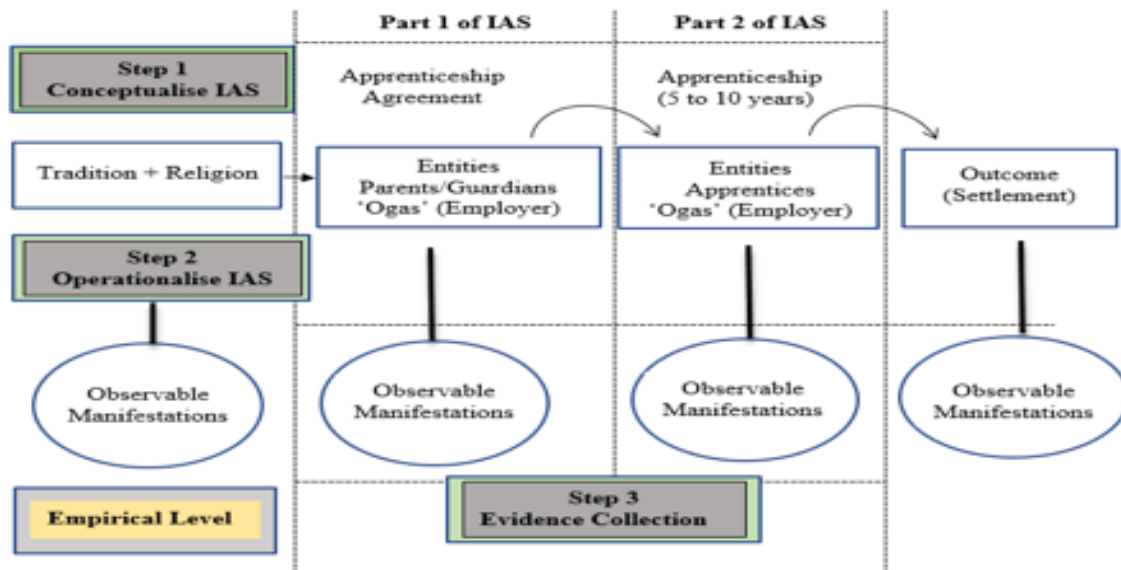


Figure 2: The process Tracing (PT) technique used in this study

4.1. Research Sample and Data Collection

The sample for this research was drawn from a pool of Igbo entrepreneurs in Nigeria currently in the IAS system either as Apprentices or as masters or 'Ogas' (i.e., employers). In designing the approach for this research, it was important that the theoretical perspective is clearly articulated. This study utilised the illustrative case study approach was chosen, adopting a multi-modal approach for data collection that included interviews with the Masters (employers) and direct participant observations of apprentices by way of daily journal entries.

In soliciting diary entries, we had to establish a balance. We sought to establish a user-friendly procedure that enabled the participants/diarists to express themselves while also directing them toward the subjects or themes that we were interested in. We used several methods to accomplish this: (a) the diary required straightforward, everyday activities, like daily chores at home and in the shop; (b) the instruction was straightforward and non-prescriptive; and (c) we established a rapport with the participants that enabled us to call them often and gently nudge them not to forget the entries. The datasets include: (a) 10 former apprentices from across different sectors who have participated in and supported others through the apprenticeship program (regarded as master or 'ogas'); (b) 20 current apprentices and (c) archival records. This approach agrees with the argument of Selfe (1985: 89) that "...methods of indirect observation provide only an incomplete reflection of the complex set of processes in composing, a combination of several such methods should be used to gather data in any one study." Thematic analysis was employed for this study.

5.0. Results/Findings

This study focused on the learning process, albeit informal, and explored it in relation to established pedagogical approaches that could be applied to other contexts because the goal of this study was to comprehend the skills development and knowledge acquisition of the apprentices in the IAS. From the findings, it can be deduced that the typical length of an apprenticeship is between three and ten years, with some programmes lasting up to fifteen years (in extreme cases), depending on the trade or sector and the age of the apprentice at the time of enrolment. It should be mentioned that girls typically do not participate in the process due to the nature of apprenticeships and cultural factors. Instead, girls participate in a variety of apprenticeships that do not mandate that the apprentice reside with the Master. As a result, this study's participants are all male. Table 1 provides a breakdown of the respondents' profiles.

Table 1: Demographic profile of respondents

	No. of respondents	Percentage (%)	Type of businesses	Percentage (%)
<i>Age of respondents</i>				
15-30	40	67	Supermarket	25
31-40	14	23	Clothing/tailoring	5
41-50	5	8	Electronics	12.5
Above 50	1	2	Mechanics	5
			Building materials	20
Marital status of respondents				
Single	40	67	Health and Beauty	7.5
Married	20	33	Electrical materials	5
			Medical Supplies	5
Years in Business (business experience post apprenticeship) – 20 masters				
< 2 years	2	10	Interior decoration	2.5
2- 5 years	5	25	Boutique	7.5
6-10 years	8	40	Wholesale and Retail	5
> 10 years	5	25		
Years in Apprenticeship (current apprentices) – 40 apprentices				
< 1	3	7.5		
2 - 5	10	25		
6 - 10	21	52.5		
10 - 15	4	10		
> 15	2	5		

Illeris (2002:24) defined learning as ‘any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing’. When it comes to cognitive (content), the emotional (incentives), and the social (interaction), elements of learning-by-doing or workplace learning, are two distinct, yet integrated processes at work (Poortman et al., 2011). The findings from the data gathered are categorised into themes related to the research goals: (a) learning by repetition; and (b) learning by doing, to better understand the variables. The apprentices' experiences and perspectives on skills acquisition in the IAS are presented in this section with the use of the process tracing approach. Overall, the data revealed the subjectivities employed by the apprentices and how they dealt with the intricate sociocultural issues that are woven into the learning process.

5.1. Learning by Repetition

The findings from the data reveal that the IAS approach is consistent with established approaches used in entrepreneurship education programmes involving learning by repetition and learning by copying (mimetic). This is consistent with Pektova (2009) and Bruner (2001) who explained that learning through repetition supports several crucial educational goals, including self-directed exploration, the capacity for reflection, consistency, and mental clarity which foster deep learning. Given that the goal in IAS is for the master to achieve the ‘Goldilocks’ result with the right amount of repetition, this finding further confirms that the apprentice has the chance to learn about business models during the subsequent stage of incubation and receive guidance and training on how to interact with customers and close sales. This is consistent with Pittaway et al., (2017) and Wang and Chugh, (2014), who argued that apprentices who learn by repetition gradually become more engaged with ideas and concepts during the learning process, thus enabling them to reach a critical mass that helps them to internalise the concept. We thus argue that through the repetitive interactions with the master and the customers, the apprentices develop the impulses for the process of internal knowledge acquisition and gain skill, knowledge, or competency, built through this acquisition process. We further posit that the opportunities provided by IAS for training, learning, co-creation, and the development of business concepts like contemporary incubation platforms do in the competitive, aggressive world of high-stakes business where profits and losses hold a premium has the capacity to ensure entrepreneurial success thus leading to more successful entrepreneurial outcomes in Nigeria. This more so given the more challenging and real-world setting for training and nurturing that the IAS offers as Table 2 shows.

To better understand the learning process in the IAS, this paper adopted the diary data collection approach. With this approach the participants self-reported their behaviours, activities, and experiences over a four-week period and the approach enabled us to develop a deeper grasp of the process, patterns, and concepts. From the diaries and archival records, we found a consistent pattern that is traditional/customary at best and different from the formal apprenticeship systems. This helped to provide a deeper understanding of the feelings and sentiments of the apprentices in the early stage of the IAS because the daily diary recording also encouraged deeper reflection. The findings indicate an unstructured approach to learning however significant emphasis is placed on repetition as a vital approach to learning a skill which as indicated earlier supports Collins (1991).

The data from the diaries of the apprentices showed that 83% of the participants alluded to optimism, motivation, and their approach to learning with a "can do" which is consistent with Bruner (2001), who argues that these attributes accelerate and deepen the engagement training programmes. This shows that despite serving in various capacities, including as domestic help, they remain enthusiastic, passionate and grateful for the training and these attributes influenced their intention to engage in behaviours that resulted in positive attitudes and invariably positive outcomes. The 'can do' attitude including the support from their masters also impact on their perception of the ease in engaging in new venture creation. With all these attributes, it can be deduced that more successful entrepreneurial outcomes will ensue especially given their enthusiasm and passion. Similarly, the evidence of learning-by-repetition produced confidence and consequently positive attitude in the apprentices and this finding resonates with the normative beliefs of self-awareness of the theory of planned behaviour, and these are vital in the IAS. In addition, the parents and guardians make all the necessary arrangements to get the children and the wards to take part in the programme hence the significant others in the lives of the apprentices' support and approve their engagement in the apprenticeship system. To this extent, the application of the theory of planned behaviour tends to be suitable for this study. As one apprentice put it,

".... being an igbaboi is a blessing. Every young boy in our community looks forward to this opportunity especial an opportunity to learn from a successful oga. I have to remind myself of that every day and this makes it more important that I do not disappoint my oga and my family too" (P 9)

Within the PBC element of the TPB, the knowledge of available resources, chance recognition, or barriers may also serve as motivators for particular behaviours. Through the repetitive interactions with the master and senior apprentices, the apprentices develop a sense of what

resources are available to them during the apprenticeship and what will be available on completion of the programme. This has implications for the development of impulses for the process of internal knowledge and skills acquisition or competency built through this process. Given this finding, we believe that the repetition of patterns is beneficial to mastery despite the difficulties sometimes faced in finding opportunities to repeat concepts.

Table 2: Coding nodes for learning by repetition and typical quotes

Educational Goals for Learning by Repetition	Source Number*	Reference Points**	Direct Quotes
Self-paced discovery/learning	18	41	<i>“Since I joined my ‘oga’ 6 months ago, every morning after doing the house work, I come to the shop and do the cleaning, arranging and running errands for all the senior apprentices. My ‘oga’ told me to take my time and observe what everyone is doing so that I can understand it very well before I start doing more harder work” (P5).</i> <i>“I am the third apprentice, so I am always the one to open the shop, clean it, dust all the equipment and get the shop ready to receive customers. I display the plain and pattern materials and I run errands for the other apprentices. My oga told me to continue doing this until I am comfortable then I will start learning how to cut materials” (P3).</i> <i>“I started my apprenticeship two years ago. For the first year, my oga never pressured me or give me any list of things to do. I used to do the errands and observe the senior apprentices to learn what they are doing. After some time, he started sending me to the market to get supplies. He told me he will know when I was ready for that next step in the training” (P2).</i> <i>“In my case, I started going to market for my oga after three months. My oga used to praise me that I am a fast learner and that I learnt faster than my older apprentices. I was the youngest among 6 apprentices, but I started going to market after only 3 months while some took a year and others over a year. As soon as he saw that I was ready, he started giving me more to do” (P12).</i>
Reflective thinking	12	35	<i>“At the end of every week, my oga will call us together to discuss our activities and performance. We talk about what was good and what was not good so that we can look for ways to improve. Because of this, every time I have to consider everything that happened before we have the meeting so that I can know what to say” (P16).</i> <i>“Every week, we used to discuss what we did to see if there are issues, we need to change. As a new apprentice, this helps me to consider what I found difficult or challenging and try to see how to understand the situation and the things that my master is trying to teach me” (P17).</i>
Consistency	19	29	<i>“My oga told me when I started my apprenticeship that I should continue to do the same things every day because practice makes perfect. It was not easy at first to be doing the same thing over and over again, but after sometime, I find it much easier” (P4).</i> <i>“My oga told me when I started to watch my senior apprentices and see how they do things the same way all the time. He made it clear that diligence is very important if you want to succeed in life. You cannot do something right today and wrong tomorrow, it does not work like that” (P6).</i>
Clarity	19	31	<i>“At first when I started my apprenticeship, it was very confusing but the more I continued to do the things, it became easier to understand what my oga wanted me to learn. Now I think that if he gave me instructions without telling to do it every day, I may not understand it quickly” (P13).</i>

Notes: * References indicate the number participants / ** indicates the number of related quotes found in the data. Participants may have made more than one statement associated with the nodes.

5.2. Learning-by-Doing / Experiential Learning

The learners in the apprenticeship program participate in learning-by-doing by taking action alongside others, typically other apprentices but also external stakeholders. This finding is consistent with Vygotsky (1925) who developed the theory of learning-by-doing as figure 3 shows. Conversely, it is at variance with Egan, (2004) who suggests the use of the acquisition-based model. Similarly, the finding support Vygotsky (cited in Lackeus, 2020) and (Miettinen, 2001, p. 299) with regards to the "externalisation of activity into artefacts¹" and "internalisation of activity and the production of mental actions," which the author refers to as the two fundamental results of human activity. We further found that in the IAS internalisation results in deep learning and externalisation produces value or venture creation. Thus, the tools, rules, procedures, knowledge, ideas, and other elements represent shared artefacts, new artefacts, and cognitive artefacts in IAS. The finding shows that the IAS learning process includes curiosity, creativity, initiative, teamwork, and personal responsibility which are the elements of entrepreneurial culture promoted by OECD (Lackeus, 2020). Thus, with the application of the learning-by-doing framework, the research created a connection between entrepreneurship and experiential learning.

The narratives from the 'ogas' showed that curiosity, initiative and personal responsibility was the differentiating attribute between the apprentices. Hence those who exhibited these attributes were favoured above others who did not. The research also indicate that the learning-by-doing strategy encourages the apprentices to develop learning habits by default through its deep learning component. Apprentices have opportunities to take initiative, engage in interaction with meaningful outcomes, especially outcomes that benefit the larger community. The system essentially relies on interactions therefore, it is team-based. Table 3 shows the coding nodes of the learning-by-doing.

A person's attitude (AT) towards taking action or not. This is internal and results from personal judgement and behaviour assessment based on personal views. Evaluation compounded by adoption of these behaviours results in outcomes (intention).

¹ Anything produced by human art and craftsmanship is defined as "artefact" (Hilpinen 2011).

Table 3: Coding Nodes for Learning-by-Doing and Typical Quotes

Educational Goals for Learning by Repetition	Source Number*	Reference Points**	Direct Quotes
Surface learning	15	33	<i>“This business was chosen for me by my father. Left to me, I would ave preferred to learn mechanic instead of supermarket business. Sometimes I feel like I am learning something that I am not interested in” (P11).</i> <i>“My oga usually send me to the market to buy spare parts for our workshop. I find that I enjoy that part more than the mechanic work itself. I enjoy the interactions with the suppliers, negotiating for lower deals more that repairing cars” (P15).</i> <i>“I am learning to become a tailor but I feel as if I don’t know a lot about fabrics. There are times when customers come with their fabrics to make certain styles, my oga will tell them that it cannot be done with the fabrics but I don’t know how he understands that and even though he tried to explain to me, I still don’t understand it” (P19).</i> <i>“Our business is very technical and I wonder if I will be able to master it on time. I don’t want to spend too much time as an apprentice, I need to finish and get settled so I can support my parents. I am worried that I may not too long that will not be good for me” (P16).</i>
Deep learning	19	46	<i>“Since I became an apprentice, my oga has made sure that take my time to learn what he is teaching me. He makes sure that I am active and he always use what I know to teach me what I don’t know” (P5).</i> <i>“My oga allows me to make mistakes without any punishment. He always says that wise people learn through mistakes” (P17).</i> <i>“As an oga, I make sure that confront my apprentice’s misconceptions and engage them actively in the learning process. I believe that it is important to keep them focused. I also ensue that I am consistent and fair in my assessment of their progress or when to introduce new concepts” (oga 3)</i>
Interactions	20	48	<i>As ‘oga’, one of my main responsibility is to ensure that my apprentices engage in real-world, concrete, professional, long-time consulting experiences” (oga 1).</i> <i>“I encourage my apprentices to out and interact with apprentices serving in other businesses, they need to get outside ... and into conversations with them as well as with customers. This is not the only place where they can learn, there is information everywhere” (oga 8)</i>

Notes: * References indicate the number participants / ** indicates the number of related quotes found in the data. Participants may have made more than one statement associated with the nodes.

The results of this study support similar apprenticeship studies' conclusions that, in the event that there was a perceived additional benefit of attending training, learners were more inclined to participate in it even when resources were unavailable (i.e., positive attitude). They include having an 'oga' that is interesting and knowledgeable, participating in interactive activities that help apprentices grasp and apply the information, or receiving points for taking part in active learning activities. Similar to this, the apprentices' desire to exhibit professionalism and live up to the 'oga's' standards (i.e., positive subjective norm) has also been noted as a key factor in their active participation in the IAS. Perceived behavioural control was found to be a strong predictor of desire to participate in the daily repetitive tasks in this study.

This study reports the first use of the TPB to assess predictors of apprentices' intention to attend enrol in the IAS. Attitude and subjective norm were the most important constructs that predicted intention to engage in the learning-by-doing process. We sought to determine behavioural beliefs and normative beliefs that were predictive of apprentices' attitudes and subjective norms, respectively, as these constructs are predictive of high intention engagement. The study found that the apprentices' favourable attitude towards the training were founded on the belief that their engagement will put them in good stead with their masters, shorten the length of time spent learning the trade, enhance the skills development process. Similarly, the positive attitude towards the apprenticeship is based on the belief that the interactive activities with the wider community of apprentices will help build necessary networks. This has implications for both the surface and deep learning. The perceived expectations of masters and senior apprentices regarding engagement were predictive of a positive subjective norm. This suggests that increasing "social pressure" to engage by the involvement of parents and guardians is the norm and it increases and improves the engagement of the apprentices.

Although the structure of the IAS is informal, the model of learning resembles the tool-mediated approach designed by the psychologist Vygotsky in 1925. This approach emphasises the value creation mechanism that characterises the IAS which juxtaposes value creation with venture creation. Thus, the apprentices engage in activities that trigger the development of entrepreneurial competencies (refer to figure 3).

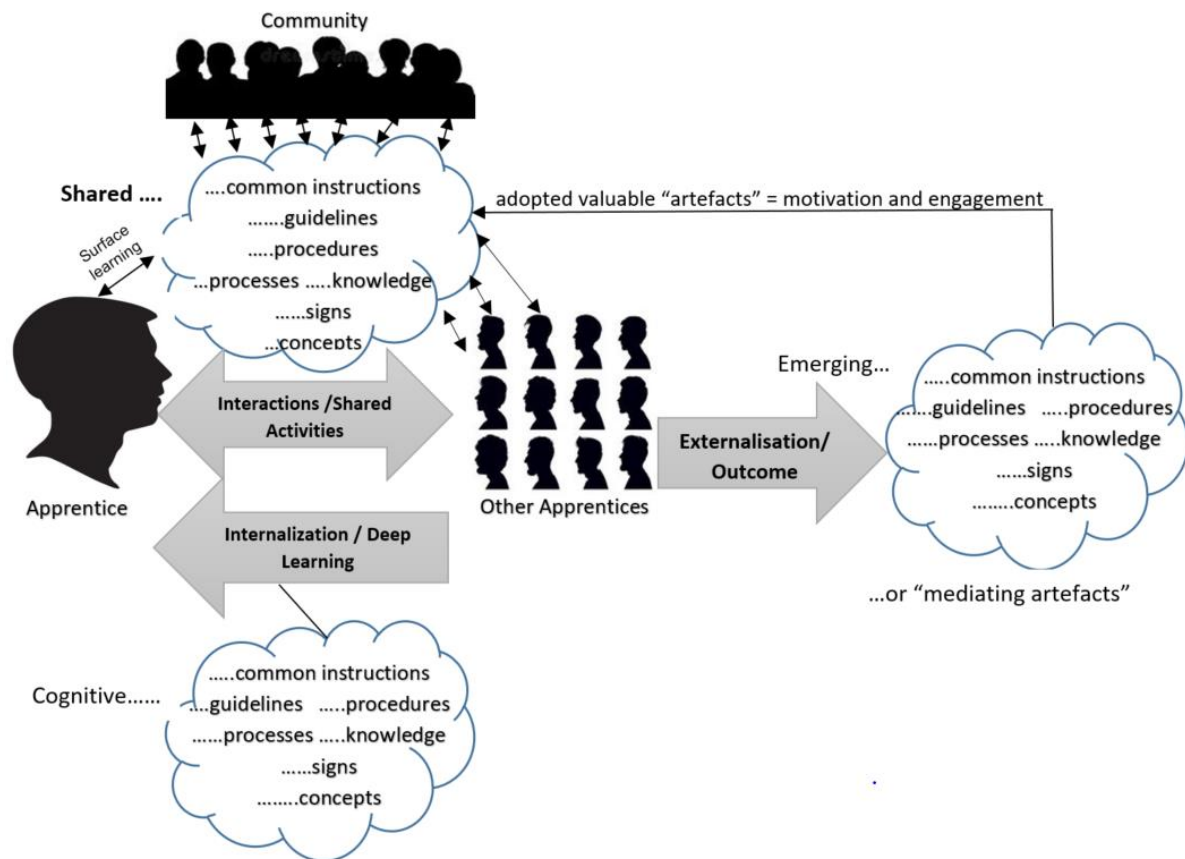


Figure 3: The Learning-by-doing process in the IAS (An adaptation from Lackeus, 2015)

6.0. Conclusion and Recommendations

The main objective of this study was to examine the process of learning and skills development in the Igbo Apprenticeship System which is predominantly practised in South- East, Nigeria. The Theory of Planned Behaviours was employed to understand the subjective norms and the PBC in the decision to engage in the program. By adopting an inductive approach using indirect observation and applying the process tracing techniques, data was collected and examined to understand the learning process of the apprenticeship system. In doing this, we increased the understanding of how and why the IAS has remained viable and successful in creating many entrepreneurs over the last six decades. The findings from this study shows that the process has the potential to trigger deep learning which has been known to increase engagement, self-efficacy, feeling of self-relevance and joy among the apprentices. Given the success of the IAS in producing entrepreneurs, contributing substantially to the Nigerian GDP and in producing a huge incubator platform, it is surprising that is still not receiving the necessary recognition it deserves perhaps because of its informal characteristic.

While there are many players in the IAS process, families, communities, the Oga (entrepreneur) and the apprentice, there is a danger that it might become a closed loop of learning. Mastery can only be achieved to the level of the current Master, unless the apprentice has the capacity to improve on the model and use their learning and reflection to bring the business model up to date. Learning is at its most effective when it can be responsive to the environment in which it operates. Successful entrepreneurship is not just about transference of knowledge, but about the transformation of knowledge. The learner needs to play an active role in their learning. While repetition can build skills, competence is a combination of skill and knowledge.

To this end, we recommend that the theoretical foundations, associated research and practical implications of the IAS be promoted by the departments of education and trade. Entrepreneurial education in Nigeria should be designed to incorporate the lessons learnt from the informal structure of the IAS and include other pedagogical approaches, debates and frameworks in designing a framework that creates value for all stakeholders (internal and external) as a formal part of the entrepreneurship education curriculum.

6.1. Contribution, Implications and Limitations

The study provided empirical evidence of the implementation strategy of the IAS thus, it improves the understanding of the system and the relationship between IAS, the learning process, new venture creation and sustainable entrepreneurship. Thus, it contributes to the apprenticeship and sustainable entrepreneurship literature and has implications for practice and policy.

The study also contributes to the literature on entrepreneurial learning process the overwhelming evidence that the IAS has and is still contributing to successful entrepreneurship in Nigeria and by extension in the West African sub-region. This system of apprenticeship can be extended to other parts of Africa to support mire entrepreneurial success in Africa and reduce poverty that permeate the very fabric of the African people. Similarly, consideration of the high rate of success of the IAS training process it has implications for practice in business schools.

The finding that the IAS apprenticeship learning process is virtually cost free for the apprentices and their parents/guardians despite being a successful means of providing a genuine and undeniably a contemporary example of how entrepreneurship can be propagated successfully with its possibility of being embedded uniquely into and across cultural norms has

implications for policy. The research accentuates the significance of the relationship between extended families and the informal system of apprenticeship practiced almost predominantly among the Igbo ethnic group.

In sum, the IAS offers a model and a clarification of how the Igbos foster and create transgenerational entrepreneurial activities and wealth.

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