

The Igbo entrepreneurship system: A model for stakeholder capitalism

Eze Simpson Osuagwu*
Helms School of Government
Liberty University
1971 University Blvd, Lynchburg VA 24515
Email: eosuagwu1@liberty.edu, ezeosuagwu1@gmail.com

*International Institute for Development Studies, Wilmington DE 19805.
Email: ezeosuagwu@iidstudies.org
Phone: (302) 666-9359

Abstract

This study examines the relationship between culture and economic development using the case of the Igbo ethnic group of Southeastern Nigeria. The Igbo traditional apprenticeship system has been widely described in contemporary political economy literature as a model for stakeholder capitalism and shared prosperity for sustainable entrepreneurial development. This study draws a sample of 2,000 entrepreneurs from five business clusters across Nigeria in Aba, Onitsha, Nnewi, Lagos and Abuja to ascertain if there is a significant difference between the entrepreneurs who passed through the traditional apprenticeship system and those who did not. The study employs a Propensity Score Matching technique to analyze the data and to answer the research questions: whether the Igbo apprenticeship model affects business growth and survivability, the role of family on the success of the Igbo enterprise, and whether societal culture has a significant effect on Igbo entrepreneurial development. The study finds a significant relationship in all the hypotheses, noting that apprenticeship training enhances weekly revenue, business inherited from family has more years of survival and an entrepreneur who received financial settlement from mentor has more start-up capital. These findings underscore the importance of the Igbo traditional apprenticeship system in promoting value-creation for shared prosperity, which is a major tenet of stakeholder capitalism. The Igbo society could be described as one of the most socially stable and economically prosperous ethnic groups in sub-Saharan Africa due to their hard work and perseverance. This study recommends that policy makers should formalize these enterprises to enhance their contribution to the economy of Nigeria. Furthermore, small business capital should be accessible to entrepreneurs and other ethnic groups should be encouraged to emulate the Igbo apprenticeship system for social stability and economic progress.

Key Words: Entrepreneurship, Traditional Apprenticeship, Political Economy, Igbos, Southeastern Nigeria, Stakeholder Capitalism, Shared Prosperity, Propensity Score Matching.

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INTRODUCTION

The Igbos of southeastern Nigeria have been practicing stakeholder capitalism for centuries, through a communal apprenticeship system that requires a mentor to train a mentee, to facilitate an independent entrepreneurial and self-sustaining life (Osiri 2020; Ekekwe 2021). This system enhances economic equilibrium by encouraging businesses to support one another in a cooperative rather than competitive manner. Whilst traditional capitalism is propelled by self-interest, stakeholder capitalism is propelled by communal interest. The Igbo apprenticeship system entails working under a mentor and learning the secrets of the mentor's trade and skills for a definite timeframe. Often, the agreement between the mentor and mentee is verbal without any strong legal connotation (Iwara, Amaechi and Netshandama 2019). In the present scheme of things, the world of business needs to learn from this system of stakeholder capitalism, which promotes shared prosperity. Stakeholder capitalism is a concept that promotes the interest of shareholders alongside the members of a community, workers, and consumers inclusive. Freeman, Martin, and Palmer (2007) contend that traditional capitalism leaves little room for ethical consideration; focuses on value-capture rather than value-creation.

The Igbo entrepreneurship model forms the backbone of the modern Nigeria commerce because it provides the bases for the growth of small and medium enterprises (Oregiu & Nafiu, 2014). In all the major cities of Nigeria, Igbo businesses account for about 60 percent of all commercial investments (Agozino & Anyanike, 2007). Igbos migrate to other parts of Nigeria and around the world to establish their businesses. The Igbo trader is groomed in the various categories of entrepreneurial development. There are basic categories identified in the literature of Igbo Traditional Business School (I-TBS) as the stages a mentee passes through under the supervision of a mentor - *Igba boi* or *Igba odibo* (serving a mentor), *Imu ahia* or *Imu Oru* (learning a trade or craft) and *Igba oso-ahia* (being a middleman in the market). Adeola (2021) opines that to maintain business value and basic cultural orientations, the Igbos have a strategic system for recruiting and managing talent for sustainable business growth and performance.

The Igbo traditional business model is a well-structured informal business and entrepreneurial method of skill transfer and business expansion that reflects the cultural values of the Igbo society to fit into a universal socio-economic environment, given the right circumstances. In addition, there are basic financial practices, sales negotiation techniques and conflict management principles that are peculiar to the Igbo entrepreneurship system that this paper highlights. However, the impact of this far-reaching culture of apprenticeship as a means of sustainable economic development in the Igbo society has not been empirically ascertained. Despite the efforts of some scholars, data constraints impose limitations for any comprehensive empirical analysis of the Igbo entrepreneurship model on the economy of Nigeria. To this end, this study intends to fill this gap through an empirical examination of the effect of individual, family and society on the Igbo traditional apprenticeship system leading to a sustainable entrepreneurial culture.

The problem is whether the Igbo traditional apprenticeship system has received adequate academic and intellectual attention to enable the process to be replicated in other cultures, to maintain a sustainable level of economic growth and development in Nigeria. Igbo apprenticeship system has been described as an enduring practice by the Igbos in South-Eastern part of Nigeria, and as the most sustaining business incubator in the world (Neuwirth 2018). It creates new

opportunities for individuals to overcome the unemployment problems in Nigeria, especially since the economy begins to dwindle due to mismanagement of the oil revenue by the political elite.

The Igbo apprenticeship system is a process of grooming an individual through learning a trade or skill, and at the end the mentor provides financial support for the mentee to set up own business. Albeit, Igbo entrepreneurship model is primarily based on the apprenticeship system, where successful businesses provide capital for start-ups. This form of stakeholder capitalism has been practiced for centuries in Igboland and has produced very notable billionaires who have been able to contribute to the growth and development of the world economy (Ekekwe 2021). In sharp contrast with other major ethnic groups in Nigeria, Halliru (2013) observes that the Igbo apprenticeship culture encourages business growth as opposed to some other systems where an individual serves his master indefinitely without any plan of making him independent. The Igbo apprenticeship system provides a definite time for the individual to learn the skills required for an independent, and successful entrepreneurial career.

In order to empirically demonstrate that the Igbo traditional apprenticeship system is a sustainable entrepreneurial model that follows the tenets of the theory of stakeholder capitalism, this study proposes three research questions, based on revenue earned by an entrepreneur after undergoing apprenticeship, the role of the family on business survivability and the impact of the societal culture on the relationship between the mentor and the mentee;

1. What is the effect of apprenticeship training on the revenue earned by an entrepreneur?
2. To what extent do family relationships affect business success and survivability of the entrepreneur?
3. What is the impact of societal apprenticeship culture of financial settlement by a master or mentor on the start-up capital of the entrepreneur (mentee)?

The following null hypotheses will provide answers to the research questions;

1. Apprenticeship training has no significant relationship with the amount of revenue earned by an entrepreneur.
2. Whether the business was inherited from family has no significant relationship with the number of years in business.
3. Apprenticeship culture of financial settlement has no significant relationship with the amount of start-up capital.

The empirical results from a Propensity Score Matching (PSM) technique indicate that all the three null hypotheses were rejected in favor of the alternative; which indicates that apprenticeship training significantly enhances average weekly revenue of the entrepreneur, businesses inherited from family survives more years given the circumstances of the explanatory variable, and entrepreneurs who received financial settlement from their mentors after apprenticeship have more start-up capital than those who did not. Based on the results of this empirical assessment, the study concludes that the Igbo apprenticeship system provides the basis for business growth and survivability in Nigeria and other ethnic groups should be encouraged to adopt this system of skill transfer and wealth creation that encourages sustainable business growth for socio economic advancement. Above all, this system allows businesses to carry along other stakeholders in the community through the path of economic progress.

This study is presented in five sections; section one introduces the entire study, section two discusses the relevant literature, section three examines the applicable theoretical framework, section four presents the method for data analysis and discusses the results, section five concludes the study.

LITERATURE REVIEW

On Stakeholder Capitalism

Scholars are of the opinion that traditional capitalism focuses on value-capture rather than value-creation, (Freeman *et al.* 2007). To reframe the narrative, they argue that the assumptions about capitalism are inadequate for sustainable socio-economic equilibrium. Traditional capitalism entails a competitive market being controlled by the invisible forces of demand and supply and driven by the insatiability of wants. To this end, the pursuit of self-interest and the desire to reap enormous profit from invested resources hampers the moral angle of prosperity. Freeman *et al.* (2007) further argue that institutional structure and market design could help to create value for all, rather than capture value for a few. This process could help to minimize overall transaction costs and foster good behavior among market participants.

In the same vein, Ruggie, Rees & Davis (2020; 2) opine that stakeholder capitalism is about reliving the Davos Manifesto of the 2020 World Economic Forum: “The purpose of a company is to engage all its stakeholders in shared and sustained value creation. In creating such value, a company serves not only its shareholders, but all its stakeholders – employees, customers, suppliers, local communities, and society at large.” These scholars agree that no serious intellectual or academic debates have been carried out for a long time to reexamine the deficiencies of capitalism and the corporation's social purpose. Nonetheless, academics have oftentimes repudiated the lack of moral and fiduciary responsibility leading to corporate failures.

Stakeholder theory should be considered as a tool to be used by businesses to manage their external environment more effectively, with less emphasis on the profit motive but to create value and a sustainable business atmosphere. The business atmosphere extends to the individual, family, and society at large. The Igbo entrepreneurship system, in its traditional make-up captures all the basic structures of stakeholder capitalism, in the sense that individuals work together to create a sustainable relationship in the common pursuit of value creation for the community. Whether the tenets and conduct of apprenticeship system of Igbo entrepreneurship model meets the human rights condition of United Nations Guiding Principles (UNGP) as expressly discussed in Ruggie *et al.* (2020) is a matter for elaboration in another study. But what is important now is to show that the basic economic principles canvassed by scholars in the last decade as a remediation to capitalism is being practiced by Igbo entrepreneurs.

The problem of competition is very dominant in the market system, due to many demands for limited resources. However, business ethics require that individuals should focus more on cooperation rather than competition for a more sustainable organizational development. Cooperating with stakeholders will create valuable and mutually beneficial externalities to promote trade and economic prosperity. Whilst mutually beneficial trade creates value to promote

the market system, dominance captures value, which eventually produces monopolists that destroy the market system. Freeman *et al.* (2007), noting that the principles of capitalism are worthy goals in and of themselves, stakeholder capitalism is based on freedom, rights, and the creation of consent of positive obligations. Rather than focusing on individuals competing for limited resources in a capitalist system, stakeholder capitalism focuses on individuals in a voluntary relationship to create value for a sustainable business environment. Igbos have imbibed this culture of mutually beneficial trade in the pursuit of business relationships, instead of competing for limited resources they cooperate with one another to share the limited resources for value creation and a sustainable entrepreneurial development. In the same vein, scholars argue that when firms fail to manage for stakeholders, they contribute to stakeholder marginalization, which causes disequilibrium in the distribution of economic resources (Laplume, 2021; Meramveliotakis 2022).

Igbo entrepreneurship model is an age-long traditional method of skill transfer from a mentor – a “successful” businessperson to a mentee – a young man from the community who has shown interest in learning the skills and trade of his mentor (Bakersville 2013; Ratten 2014). The Igbo traditional entrepreneurship system anchors on a mentor training a mentee on a specific trading skill or artisanship to enable the mentee to continue in that line of trade after he has received adequate training to stand alone. The apprentice in most cases is a young man who has completed secondary education or dropped out of school due to lack of funds to continue in formal education. The lack of social protection pushes young men to pursue careers in trading or acquiring a technical skill that would quicken the process of independent living. The Igbo entrepreneurship system promotes the interest of shareholders alongside the members of a community, workers, and consumers alike (Agu *et al.* 2022). Ekekwe (2021) describes this system as a form of stakeholder capitalism, because the owner of a business grooms his competitor, provides the necessary financial support and relinquishes a proportion of the market to the mentee. Sometimes the mentor leaves the market outright for the mentee to take over the entire customers. This method enables businesses to grow and expand rapidly. This traditional method of skill transfer has produced many successful businesses owned by Igbos across the globe.

The traditional apprenticeship system creates small and medium scale enterprises, which is necessary for economic growth in a developing country like Nigeria. The Igbo culture and tradition are transmitted through norms and ethics (Stevenson and Jarillo-Mossi 1990). There is no written codes or records for the Igbo way of life or apprenticeship model, neither is it regulated by any agency or government authority. It is a way of life that is inculcated through a culture of support for one another. However, entrepreneurs adhere to strict conditions of due diligence that are traditionally embedded into the relationship with stakeholders. In this case, business entities regard themselves not as a mere piece of private property owned by their shareholders but as a social entity, able to render enormous support to stakeholders – members of the immediate community.

Agu & Nwachukwu (2020) in examining the relevance of the Igbo Traditional Business School argues that perceived desirability, perceived feasibility, and propensity to act are significant predictors of entrepreneurial intention. The paper applied a multiple regression on a sample of 122 micro-entrepreneurs (welders) who passed through the traditional apprenticeship program to conclude that mentors should aim at providing mentees the advantage of owning a business to continue the regenerative process of entrepreneurship. Applying the entrepreneurship event model

and the cognitive apprenticeship theory, the study revealed that Igbo traditional apprenticeship system through the process of learning a trade or skill transfer effectively employs economic factors of production; land, labor, and capital to achieve a desired level of economic growth and social equilibrium.

Also, Obunike (2016) in a study of 106 entrepreneurs in Onitsha found that there is a significant and positive relationship between serving a mentor in the traditional sense (*Igba-boi* or *Igba Odibo*) and effective customer relationship and profitability in business as an entrepreneur. In the same vein, Udu (2015) finds that formal educational qualification has no significant impact on entrepreneurial business growth, but the level of service quality and business expansion significantly affects profitability of the business.

On the informal sector, growth of small and medium sized enterprises

The informal sector is the largest employer of labor in developing countries, composed of several small and medium enterprises (SMEs). The structural imbalance and the lack thereof of government support hampers the growth of entrepreneurship through the informal sector. Another major problem in the development of the informal sector is access to capital (Iwara & Netshandama, 2021). Many in the developing world resort to traditional means of funding to raise capital for small business development. The African model of informal saving and investment has been significant in the growth and development of small businesses. With the advent of colonization, some of the traditional African ways of business financing have given way to “formal” sources of funding, thereby reducing capital mobilization for small business growth in the traditional sense (Adeola 2020, Iwara et al. 2019). Iwara & Netshandama (2021) in their study conceptualized the *stokvel* system practiced in south Africa and the *esusu* system in Nigeria, as means of capital mobilization in traditional African societies to support entrepreneurs for business growth, job creation and poverty reduction in rural areas.

In many developing countries, businesses are largely informal due to the lack of social security provisions. These businesses are unregistered and hence do not pay taxes to the government, although they provide employment for the teeming population, especially the youths. Even when the small businesses are registered, government lacks the capacity to implement policies to formalize their contribution to the national economy. Many of the Igbo enterprises fall into the category of informal organizations set up by individuals to provide a means of livelihood as opposed to an outright business formation incorporated in the business registry of the country. However, some of these informal organizations develop into large business outfits with huge monetary balance sheets. Nonetheless, many registered companies in Nigeria still operate in the informal economy due to their size and the inability of government to provide policies that will attract them to the formal economy, such as paying the requisite taxes and creating incentives for growth. The informal economy contributes about 65 percent to the GDP of Nigeria (Etim & Daramola, 2020). Madichie, Gbadamosi & Rwelamila (2021) observe that a major problem in Africa’s business development is the neglect of the informal sector.

In the main, some scholars have been quick to disagree with the prevailing assumption that small and medium sized enterprises (SMEs) are the prime drivers of economic growth, noting that the existence of a large share of SMEs might pose structural impediments to economic growth and prosperity (Meramveliotakis & Manioudis, 2021). This conjecture is based on an increasing

difficulty of SMEs to adapt to changing technological improvements and environmental circumstances. When formalization of small businesses become very difficult as observed in many developing countries, their contribution to economic growth is hampered (Osugwu, 2020). Albeit, when an industry is facing continuous market decline there is a need for SMEs to re-strategize for optimum performance, by reconfiguring their internal resources to reduce their reliance on the declining external network. Thomas & Douglas (2022) warns against over reliance on external resources in a declining market. Small and medium enterprises in the Igbo traditional entrepreneurship system leverage on internal resource organizations such as family, and community networks to overcome declining external resources.

The Igbo values of sacrifice, hard work, integrity, honesty, kindness, co-prosperity, truth and justice are the important values that allow business and economic life to flourish (Osiri 2020, Okolie *et al.* 2021). The family is the nucleus of the transmission mechanism of Igbo cultural values (Arthi & Fenske, 2018, Iwara *et al.* 2019). Family is the most important institution in traditional society for the cultivation of ethics. The Igbo family unit drives the apprenticeship system, which allows businesses to be handed down from one generation to another (Nnadozie, 2002; Uchendu, 2019). Integrity and honesty are important cultural values that build trust among the Igbos. The communal support that holds the fabric of the apprenticeship system is rooted on trust, since there is no written contract to bind parties.

Amaechi *et al.* (2021), using a sample of 111 entrepreneurs to analyze whether the traditional indigenous practices of *Igba-boi*, *imu-ahia* and *Igba oso ahia* embedded in the Igbo apprenticeship system provide appropriate explanation for understanding the success of Igbo-run small and medium scale enterprises in Limpopo South Africa. The study finds that the Igbo traditional apprenticeship system significantly affects entrepreneurial success, through increase in business revenue, opening of new businesses, ability to train new entrepreneurs; and customer acquisition. The study concludes that the Igbo entrepreneurs in the diaspora constitute the most innovative set of businesspeople in terms of business start-ups and engagements. Despite the sociopolitical constraints as immigrants, they struggle to overcome the odds to emerge successful in the South African business community.

However, under the Igbo entrepreneurial system, funding is primarily in the form of financial settlement from a mentor to a mentee, who has served for some years as an apprentice (Ekesiobi & Dimnwobi 2021). The settlement oftentimes goes beyond pecuniary returns, but moral and ethical grooming that will enable the apprentice to flourish as a successful entrepreneur (Agu & Nwachukwu 2022). On the relationship between culture and entrepreneurial development, Madichie, Nkamnebe & Idemobi (2008) using a survey of 30 owner-manager and 236 top management staff of indigenous firms located in Nnewi Southeastern Nigeria show a strong and positive impact of culture on the entrepreneurial and managerial performance of small firms. This study lends credence to the fact that the culture of a people critically affects their business and entrepreneurial spirit. Albeit, from historical account, the study reveals that the Nnewi stock of the Igbo nation have cultural traits that propel innovativeness, resilience and the willingness to survive independently. Through the “Afia Olu” and “Ikwa Aru” festivals celebrated annually, the spirit of industry is cultivated amongst the Nnewi people. This cultural tradition awakens the ethos and beliefs that embolden the entrepreneurial spirit of the natives, like the Taos Pueblo in North America and the Kibbutz communities in Israel.

According to Ajaekwe (2008) cultural traits in entrepreneurial pursuits could be factored into several attributes: family background, religion, history, ideology, and enterprise culture. Family business background constitute a rudimentary source of transmitting entrepreneurial skills in Igbo land. Many entrepreneurs develop their enterprise through the network of family. The Igbo apprenticeship scheme is nurtured by the extended family system that is inherent in the Igbo culture. Many Igbo businesses have survived through the passage of time, keeping pace with prosperity and economic gains by weathering the storm of macroeconomic fluctuations. The Igbo entrepreneurial resilience originates primarily from indoctrination and a culture of perseverance and preservation of family values. The family is the primary institution in the Igbo traditional enterprise, regulated by ethics and cultural norms. The transfer of skill and property is the foundation of the Igbo enterprise. Many successful Igbo businesses were transferred through inheritance. To this end, whether a business was inherited from family is an inevitable treatment variable for this study.

Major components of the informal sector in Nigeria are artisanal and non-farm activities. Traditionally, artisanal enterprises are localized and often embedded in the cultural milieu of the society. For example, in southeastern Nigeria there are iron smelters in Igbo Ukwu, leather tanning in Aba, automotive parts remolding in Nnewi, among others. Igwe, Madichie and Newberry (2019) observe that artisans are the most common enterprises in rural areas because their primary resources are localized and embedded in the culture of the people. However, the broad definition of artisanal enterprises is now removed from its local context of skilled craftsmen to an organized productive cluster of industries engaged in the production and marketing of equipment and material for manufactured goods. Artisanal industries in southeastern Nigeria possess the attributes of informality, mostly engage few family members, largely unlicensed by the government for a specific purpose and do not pay taxes. Igwe *et al.* (2018) in their study to determine the factors influencing the decision to engage in artisanal activities employed socio-economic explanatory variables; age, sex, education, household size, farm size, and access to credit. In the literature there is no concise definition and categorization of artisanal activities. To this end, in this study artisans are treated as entrepreneurs, without distinction.

An empirical study by Ekesiobi and Dimnwobi (2021) showcases the impact of the Igbo apprenticeship system on business survivability and revenue generation using samples from two clusters in Onitsha and Nnewi, all in southeastern Nigeria, but not enough to garner the requisite information for policy formulation. This study expands the scope by drawing samples from five business clusters in Aba, Abuja, Nnewi, Onitsha and Lagos, across geo-political zones of Nigeria. In addition, this study adds empirical scores to Ekekwe (2021), to buttress the argument that a culture of stakeholder capitalism is deeply embedded in the Igbo apprenticeship system.

THEORETICAL FRAMEWORK

There are several entrepreneurship theories with relevance to the broad spectrum of this study. The **anthropological theory**, which focuses on the role of culture in directing and managing a formidable entrepreneurial ability has been discussed by North (1990) and Baskerville (2003). This theory stipulates that social norms and cultural setting play significant roles in entrepreneurial success (Omonijo *et al.* 2018). Anthropological theory best describes why the Igbos quickly adjust to the culture and norms prevalent in their host communities. A major attribute of the Igbo enterprising skill is the ability to adapt to their business environment. The Igbos have been known

to adjust quickly to the lifestyle of their host communities, speaking their language, inter-marrying. The Igbo business success is rooted in the ability to integrate completely with the host community.

Second, there is the **opportunity-based entrepreneurship theory** linked to Drucker (1985) and Stevenson and Jarillo-Mossi (1990). This theory relies on the opportunity tactics for business advancement. The theory predicts that entrepreneurs discover new opportunities in every technological or customer preference change. This theory negates the Schumpeterian principle of entrepreneurs responding quickly to evolving business practices (Drucker 1985). Proponents of this theory argue that entrepreneurs adjust to business circumstances by exploiting opportunities. The Igbo entrepreneurship system being a communal based model provides opportunities for growth. Mentors relinquish market share for their mentees to enable them to grow in the initial period. There is a reasonable level of support from the community to enable the entrepreneur to learn new skills and career advancement.

Another relevant theory in the literature is the **resource-based theory**, which is regarded as an extension of the opportunity-based entrepreneurship theory (Stevenson and Jarillo-Mossi 1990). Adherents to this theory argue that entrepreneur access to resources is a critical predictor of the opportunity-based entrepreneurship theory and the growth of innovative business decisions (Alvarez and Busenitz 2001). Financial, social, and human resources are important in entrepreneurial development (Aldrich 1999). The access to resources enhances the ability of an entrepreneur to harness opportunities at his disposal. The Igbo entrepreneurship system naturally supports the adoption of all these resources for skill development. Nonetheless, the social aspect addresses the desire to acquire skills, while the financial aspect focuses on the settlement that the mentee derives from the master at the end of the training.

There is also an **entrepreneurial-event theory** that is postulated by Shapero and Sokol (1982). This theory states that the event of entrepreneurship is a result of the interaction of social factors, which comprises of an interaction between diverse ethnic groups influenced by cultural and social factors. The theory recognizes three basic constructs (perceived visibility, perceived desirability, and propensity to act) as the drivers of entrepreneurial development (Agu and Nwachukwu 2020). This theory lends credence to the analysis of cultural and social context of Igbo entrepreneurship model, which explains the mentor-mentee relationship. The mentee needs to want to succeed before starting the training scheme. The perception of the apprentice of his entrepreneurial engagements will form the basis of subsequent support from the mentor. Irrespective of the support that comes from family and community, the underlining factor is whether the mentee has a desired goal to succeed in his chosen career.

Whilst the above theoretical framework applies to the relationship between mentor-mentee in a traditional apprenticeship system leading to entrepreneurship, there is a need to review some theories that apply to entrepreneurship intentions as well. Agu *et al.* (2022) applied the **theory of planned behavior** in a study of entrepreneurial intentions. The theory holds that attitude, subjective norms and perceived behavioral control are the three main determinants of the intention to engage in a particular behavior, which transforms into the actual behavior of the individual (Ajzen 1985). Entrepreneurial intention is the self-acknowledged desire of anyone working towards setting up their own business in the future. In fact, the Igbo Entrepreneurial model relies on the intention of the mentee to work towards a business goal.

The **theory of planned behavior** presumes that the individual in this case, the entrepreneur who had passed through the process of apprenticeship must hold a positive view of himself to

make progress. Thus, individuals who conceive themselves with positive perception in life are better placed to starting up an enterprise that will eventually succeed. In the same vein, a negative perception contrives the tendency to fail. There is a strong connection between entrepreneurship intentions and attitude and perception to succeed (Agu *et al.* 2022; Agu & Nwachukwu, 2020). Therefore, there is a subjective norm that is implied on the apprentice by social pressure to perform to redeem his image and earn the trust and confidence reposed on him by his family and community. This process becomes cyclical; the mentee who has succeeded today, becomes a mentor tomorrow and so on. This process of stakeholder capitalism and shared prosperity inures in the Igbo society.

In another dimension, Osiri (2020) applied the **theory of structural functionalism** to examine the Igbo management philosophy by focusing on how institutions in ancient Igbo society were able to create a sustainable economic system that served the individual purpose and that of the community. The framework suggests that the Igbo entrepreneurship model springs from the interdependence of traditional institutions and the complexity of the Igbo society. The philosophical underpinning of the apprenticeship system is to provide support to someone who needs a helping hand to start a business of his own. To this end, the model encourages an enduring sense of perseverance, a desire to succeed and to create value for the community. Entrepreneurs who have found success in this process are those poised to learn a trade, with obedience and attention to details. At the end, the fruit of every diligent labor and sacrifice is success. The Igbo entrepreneurship model, like every other process of economic and business empowerment requires a prosperous vision and ability to push through difficult circumstances.

The structural functionalism theory has been criticized by scholars because it does not explain social and cultural changes that are major factors in business survival (Subedi 2010). Albeit, the assumption that the dynamism of societies should be captured in the framework of business management is of significance in this respect. Nonetheless, the conflict theory of Karl Marx (1859) postulates that societies are always in conflict because of competition for scarce resources. This theory suggests that those with wealth often dominate and to maintain stability they suppress the underclass (the proletariats). This conflict theory explains capitalism, but the Igbo entrepreneurship model has sidetracked the vagaries of pure capitalism through a process of stakeholder capitalism, that imbues a cooperative sense rather than competitive. The principal is guided by cultural vocation and ethics, remains loyal to a traditional system that compels him to carry his community along as a responsibility to prosperity. This concisely could be referred to as leadership at the community level. So, the criticism of structural functionalism does not apply to the Igbo society.

The Igbo entrepreneurship philosophy draws its values from hard work, enduring hardship, the spirit of sacrifice and prosperity that emanates from Christian statesmanship (Nnadozie, 2002; Osuagwu 2023). The family is the core of the Igbo institution, which prepares the youth for the world of the marketplace, where societal interaction determines success. The apprenticeship system is a formal ground for preparing the youth to take over a family business, artisanship or business skill and craftsmanship that could be transmitted across generations (Osiri, 2020; Osuagwu 2024). Although, the Igbo society is no longer as tightly knitted, because of the infiltration of modern capitalism into the society, there is still compelling evidence of the traditional model and notable successes observed in the Igbo nation. This premise underscores the goal of this research, to explore the extent of the traditional model of the Igbo apprenticeship system on the development of the economy and the stability of the society.

METHODS

Research Design and Sample

The primary data for this study draws a total sample of 2,000 entrepreneurs from five business clusters in Onitsha, Nnewi, Lagos, Aba, and Abuja. These clusters are in the east, west and northern parts of Nigeria. Although there are many Igbo businesses in the far northern states of Kano and Kaduna, this study did not collect data from those states because of logistics issues. However, this study employs an interview session based on a prepared questionnaire. Due to time constraints, the questionnaire was not distributed to respondents. Instead, the researcher interviews a random sample of entrepreneurs and records their responses. Some of the information recorded are biographic data, age, sex, marital status, educational attainment and religious affiliation of the respondent. Respondents were asked binary choice questions; whether they participated in the traditional apprenticeship system, whether they inherited business from family and whether they received financial settlement from their mentors at the end of the apprenticeship term. Other questions include, how much weekly revenue the entrepreneur earns from his business, how long has the entrepreneur being in business and how much start-up capital did the entrepreneur invest in the business. The summary result from the interview is presented in Table 1.

The respondents come in various categories of entrepreneurship and locations, but in the compilation of data, all the respondents were merged irrespective of trade. There is no specific reference to the trade and occupation of respondents; which include traders, artisans and skilled craftsmen doing business as sole proprietors, partnerships, and corporate entities. Some of the respondents are established manufacturers of goods, for example at Nnewi and Aba, some are manufacturers of products for exports, while others are small scale traders. Overall, the respondents are small and medium scale enterprises in the business of trading and manufacturing.

The theoretical framework for this study follows the entrepreneurial event model by Shapiro and Sokol (1982). The model draws on the social and environmental factors that affect entrepreneurial opportunity and ability to grow in business. The Igbo entrepreneurship model is enforced by cultural philosophies and social cohesion, which hinges on a mentor-mentee relationship. According to Obunike (2016), this model involves three stages of apprenticeship: cognitive, associative, and autonomous. To access the model's economic importance, we must understand the counterfactual of those involved in the apprenticeship training and those who did not. This will enable us to ascertain the effect of the model on business outcomes.

For this analysis, we need to apply a technique that could distinguish between a treatment and a control group. The technique employed is Propensity Score Matching (PSM) that enables randomization and control of extraneous variables. PSM uses a matching algorithm that compares the participants in the treatment group with those in the control group. The counterfactual estimation pairs the treatment and control groups and reduces the probability of a participant falling in both treatment and non-treatment group.

Respondents who passed through apprenticeship training are represented by 1, while those who did not equal 0. Reasons for not participating account for the behavior of the outcome variable. The Propensity Score Matching (PSM) is a non-parametric technique for estimating differences between the outcome variable and the control variable. Being non-parametric implies that there is no functional form (Caliendo and Kopeinig, 2005). The variables are not affected by stochastic

factors as is the case for parametric estimates. The outcome of interest is calculated using a probit model. The probit model is a binary choice model with a probability density function.

PSM has been applied in a wide range of studies; for example, in the study of the impact of training programs for the labor market on incomes (Heckman, Ichimura and Todd 1998; Lechner 1999; Dehejia and Wahba 2002; and Smith and Todd 2005). In the same vein, Jalan and Ravallion (2003) applied PSM to evaluate the impact of antipoverty workfare programs. Galiani, Gertler and Schargrodsky (2005) examine the incidence of infant mortality occasioned by poor water supply system; Trujillo, Portillo and Vernon (2005) analyze medical care participation based on health insurance needs. In recent studies, Osabohein *et al.* (2020) applied PSM to investigate the impact of a social protection policy in the form of household agricultural credit to participants on pro-poor growth in Nigeria, and Ekesiobi & Dimnwobi (2021) estimate the impact of traditional apprenticeship program on the Igbo entrepreneurship model. In all the above, the PSM model has proven to be a veritable tool for estimating the counterfactual effect of an experiment given an observable treatment effect.

Conceptualization & Measurement

A major challenge in an empirical study is how to construct a counterfactual outcome, that is what would have happened to a particular unit if the treatment is absent. This unobservable effect cannot be captured by the experiment but could be estimated statistically (Gertler *et al.* 2016). In this case, we examine the difference between entrepreneurs that passed through the traditional apprenticeship system (treatment group) and those who did not pass through the process of apprenticeship (control group). To measure the intervention effect, we consider how outcomes differ for control group relative to what is observed from the experiment, the treated group. With improvements in analytical software, the matching comparison for treated and non-treated covariates could be successfully carried out across a wide range of participants. Propensity score could be defined as the probability that a given unit in a combined sample of both treated and untreated units has received the treatment, in a set of observed variables (Heinrich, Maffioli & Vazquez 2010).

One major problem with the PSM model is how to find a comparison group that is statistically identical to the treatment group, given that at least one of the units received the treatment. The problem of missing data is always of concern, in this case, and the evaluation technique is to estimate a parameter that captures the mean impact of the program. The parameter of interest is the *Average Treatment Effect* on the treated (ATE). The impact of a treatment effect could be analyzed thus.

To define the impact of a treatment on program participants for an individual i and δ_i defined as the difference in outcome for a treatment and in the absence of a treatment:

$$\delta_i = Y_{1i} - Y_{0i} \quad (1)$$

From equation (1) we evaluate the mean impact of the program by taking the average across units in the population, known as the Average Treatment Effect or ATE:

$$ATE = E(\delta) = E(Y_1 - Y_0) \quad (2)$$

Where E is the average or expected value.

Another important value is to obtain the Average Treatment Effect on the Treated or *ATT*, a measure of those who have participated in the program:

$$ATT = E(Y_1 - Y_0 | D = 1) \quad (3)$$

The Average Treatment Effect for the Untreated *ATU* measures the impact the program would have had on those who did not participate:

$$ATU = E(Y_1 - Y_0 | D = 0) \quad (4)$$

However, all these parameters are not observable, they depend on counterfactual outcomes, which poses an estimation problem. If we juxtapose the analogy of the average of a difference to be a difference of the averages, *ATT* becomes:

$$ATT = E(Y_1 | D = 1) - E(Y_0 | D = 1) \quad (5)$$

Where the term $E(Y_0 | D = 1)$, is the unobservable average outcome that the treated units would have obtained in the absence of a treatment. The term $E(Y_0 | D = 0)$ is the value of Y_0 for the untreated units. To calculate the difference between the treated and untreated units, we obtain:

$$\Delta = E(Y_1 | D = 1) - E(Y_0 | D = 0) \quad (6)$$

To obtain the difference between Δ and *ATT*, we add and subtract the term $E(Y_0 | D = 1)$:

$$\Delta = E(Y_1 | D = 1) - E(Y_0 | D = 1) + E(Y_0 | D = 1) - E(Y_0 | D = 0)$$

$$\Delta = ATT + E(Y_0 | D = 1) - E(Y_0 | D = 0)$$

$$\Delta = ATT + SB \quad (7)$$

SB in Equation (7) is the selection bias, which measures the difference between the counterfactual for the treated individuals and the observed outcome for the untreated individuals. If *SB* is equal to zero, then *ATT* can be estimated by taking the difference in the average outcomes observed for the treated and untreated units. In some cases, the selection bias might not be equal to zero, which means that the result is biased. Hence, the goal is to ensure that *SB* is equal to zero, to estimate the parameter.

$$ATE = E(Y | D = 1) - E(Y | D = 0) \quad (8)$$

Equation (8), Average Treatment Effect is an unbiased estimate of the difference between the average observed outcomes for the treated individuals and untreated individuals, which reflects the impact of the intervention. In the case of this study, the intervention is the participation of individuals in the traditional apprenticeship program.

Since all the individuals in the sample are not exposed to the same type of apprenticeship program there are sampling errors in the experiment. However, in the design of experiment for a PSM model the random sample of individuals guarantees potential statistical independence; that is, there is no correlation between the variables for both the observable and unobservable outcomes.

If the proportions are evenly distributed as in a random experiment where all the characteristics are distributed equally between the treated and untreated, the groups will be identical, except that one receives the treatment and the other did not. This implies that:

$$E(Y_1 | D = 1) = E(Y_0 | D = 0) \quad (9)$$

The left-hand side of Equation (9) is the unobservable effect, could be replaced by the right-hand side, the observable, to estimate the *ATT*. In the design of the experiment the selection bias term is 0, to enable the impact of the program to be estimated as the difference between the average outcomes of treated and untreated groups.

The impact of the program could be estimated by a linear logistic regression model of the outcome of the treatment variable with the application of a constant term, given as

$$Y = \alpha + \beta D + \varepsilon \quad (10)$$

Where Y is the average outcome of the treatment program, α is a constant term, β captures the impact of the program, D is the treatment status and ε is the error term.

However, for many interventions random assignments do not usually occur. As a result, the assignment to experiments is not usually random. It is also possible that if there is a problem in the implementation process, the experimental design process will fail to produce a valid control group (Greene 2006).

A Probit Model is used to estimate Equation (10) for the test of the various hypotheses as follows. Heckman, Ichimura, and Todd (1997) show that omitting important variables can seriously increase bias in resulting estimates. Only variables that influence simultaneously the participation decision and the outcome variable should be included in the model.

$$Y_i = \alpha + \beta D_i + \gamma X_i + \varepsilon \quad (11)$$

For a probit regression model in a propensity score matching technique, the treatment is the dependent variable, and the outcome is the average impact of the treatment on the treated.

Where Y_i is the dependent variable, D_i is a measure of the treatment effect (assuming the value 1 for those who passed through the treatment, and 0 for those who did not), β is the coefficient that measures the impact of treatment on the explanatory and outcome variables, X_i 's are estimates of explanatory variables in the multinomial probit model, α is a constant that measures the outcome when the treatment is zero. The error term ε is the stochastic term representing the effect of other variables not included in the model.

The explanatory variables in this case are specific observable variables in the model, which includes age, sex, marital status, amount of start-up capital, how long or time in business, educational attainment, whether business was inherited from family, amount of revenue generated weekly or monthly.

Assumptions for PSM

In a PSM estimation the matching must be highly effective to reduce selection bias, and the theoretical assumptions are stated as follows:

1. The Conditional Independence Assumption (CIA) or un-confoundedness – the variable (X) for which the treated and untreated units differ must be observable, necessary to control or condition for the differences to avoid potential bias. In other words, the potential outcomes of variable X are independent of the status of the treatment. After controlling for the variable X , the treatment assignment becomes random.

2. The common support or overlap condition for each value of the variable (X) – there must be a positive probability of finding both a treated and untreated unit to calculate the mean outcomes for each value of X . In other words, the probability of receiving and not receiving treatment lies between 0 and 1.

Instrumentation and Procedures

There are three main variables identified from the literature as the core determinants of the Igbo traditional apprenticeship system as captured in the data; the individual apprenticeship training, the role of family inheritance in business and whether the individual received financial support from the mentor to start his or her business (Ekesiobi & Dimnwobi 2021, Nwachukwu *et al.* 2018). These three are the treatment variables and the goal is to observe the effect of these variables on the outcome variables, which captures the success rate of the entrepreneur both in spatial and temporal dimensions. Entrepreneurial success could be estimated by the amount of revenue the business generates, how long or time the business survives, and the amount of funds available for the mentee to start up his or her own business. Albeit, the impact of the traditional apprenticeship system that is being investigated in this case is embedded in the Igbo culture of a mentor-mentee relationship.

We must first test whether the assumptions for Propensity Score Matching hold for our data, before embarking on the necessary empirical analysis.

For data reliability in a PSM model the assumptions must be validated, then the matching process will commence with the p-scores obtained from a probit regression. Matching entrepreneurs based on observable characteristics to obtain a control group with similar characteristics. The propensity score (p-score) is the probability that an individual will be in the treatment group based on other explanatory variables. If the entrepreneurs have similar p-score that means they are comparable. In this case we create a mimic randomization of the sample by matching the p-scores. Propensity is a single number that indicates the probability that an individual in the treatment group passed through the apprenticeship training program, inherited a family business, and whether settled by the master. The treatment observation is on a binary scale, i.e. there are only two possible responses (yes or no; 1 or 0).

Steps to be taken when applying a propensity score matching technique are summarized in Jalan & Ravallion (2003). After validating the assumptions, the next line is the matching procedure. There are three basic matching procedures;

Nearest Neighbor – each treatment individual is matched to the most similar control variable according to p-score.

Radius Matching – each treatment individual is matched to the control individuals within a range of p-scores.

Kernel Matching – each treatment individual matched to all control individuals with greater weight given to those with similar p-scores.

Data Analysis

The variables in the sample are categorical, while continuous variables retain original values.

From Table 1 below, we observe that the minimum age in the sample is 22 years and the maximum age is 65. The data was filtered to remove outliers, those whose age fall above 65 and under 18. Sex and Marital status are binary variables, with 0 for female, 1 for male and 0 for single and 1 for married, respectively. In the case of Religion, all the respondents are Christians, as a result it's no longer a variable but a constant and dropped from the model.

Table 1: Data Summary Statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Age	2,000	39.51	11.18	22	65
Sex	2,000	.818	.3859	0	1
Marital Status	2,000	.669	.4707	0	1
Religion	2,000	1	0	1	1
Apprenticeship Training	2,000	.3735	.4839	0	1
Settled by Mentor	1,991	.4611	.4986	0	1
Business Inherited from Family	2,000	.1055	.3073	0	1
Start-Up Capital	2,000	587,634	308,191.9	210,000	1,400,000
Time in Business	2,000	7.5625	3.5476	2	38
Average Weekly Revenue	2,000	316,500	128214.5	120,000	740,000
Educational Attainment	2,000	2.0655	.5562	1	3

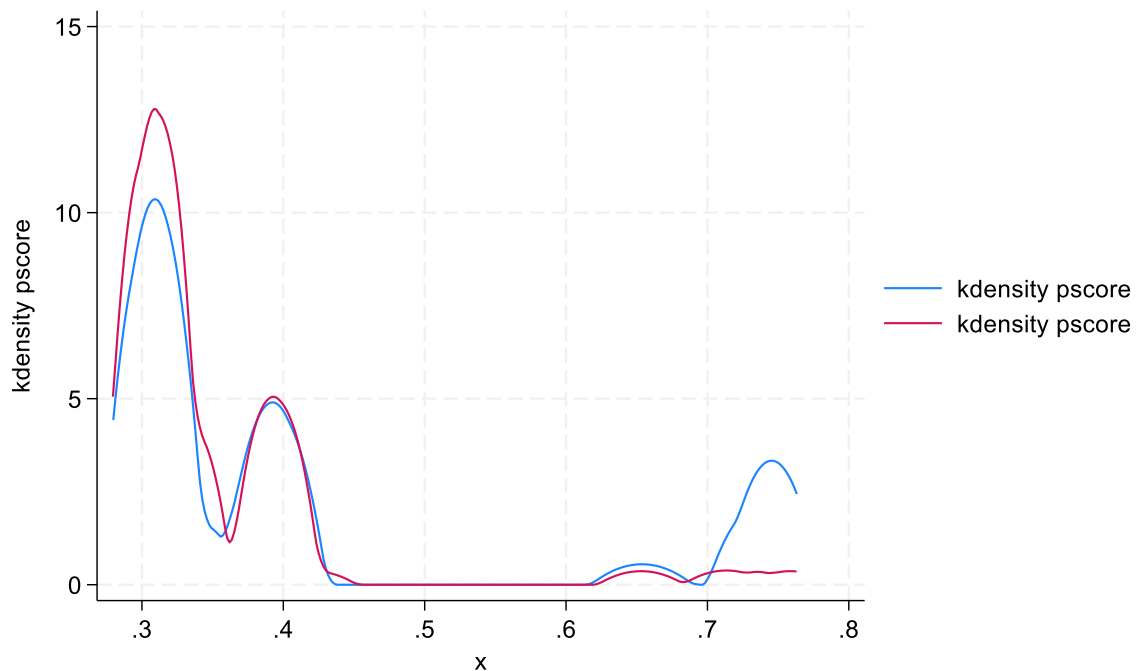
Source: Author's computation using Stata 18.0

The treatment variables, apprenticeship training, whether business was inherited from family and whether the apprentice was settled by master are dichotomous variables with binary outcomes (yes = 1 and no = 0). Start-up capital is a continuous variable that ranges from N210,000 to N1,400,000, with an average amount of N587,634. This is the amount an apprentice receives from a master or mentor as settlement after the apprenticeship period. Time in Business is the number of years the entrepreneur has been in business after the period of apprenticeship, the average time in business is 7.6 years, with the minimum of 2 years and a maximum of 38 years for those sampled. The average weekly revenue, which is a measure of performance is N316,500, with a minimum revenue of N120,000 and N740,000 Nigerian naira. The educational attainment variable is categorized into three; 1 for those with elementary, 2 for secondary education and 3 for college educated entrepreneurs.

Test for Validity and Reliability

In this probit model, the treatment variables, apprenticeship training, whether business was inherited from family and whether apprentice was settled by master are the dependent variables and the outcome variables are average weekly revenue, number of years or time in business, amount of start-up capital that the apprentice received from mentor or master after the period of apprenticeship. The reliability of these variables for a PSM model is determined by the result of the common support validation test as indicated below for the various treatment variables.

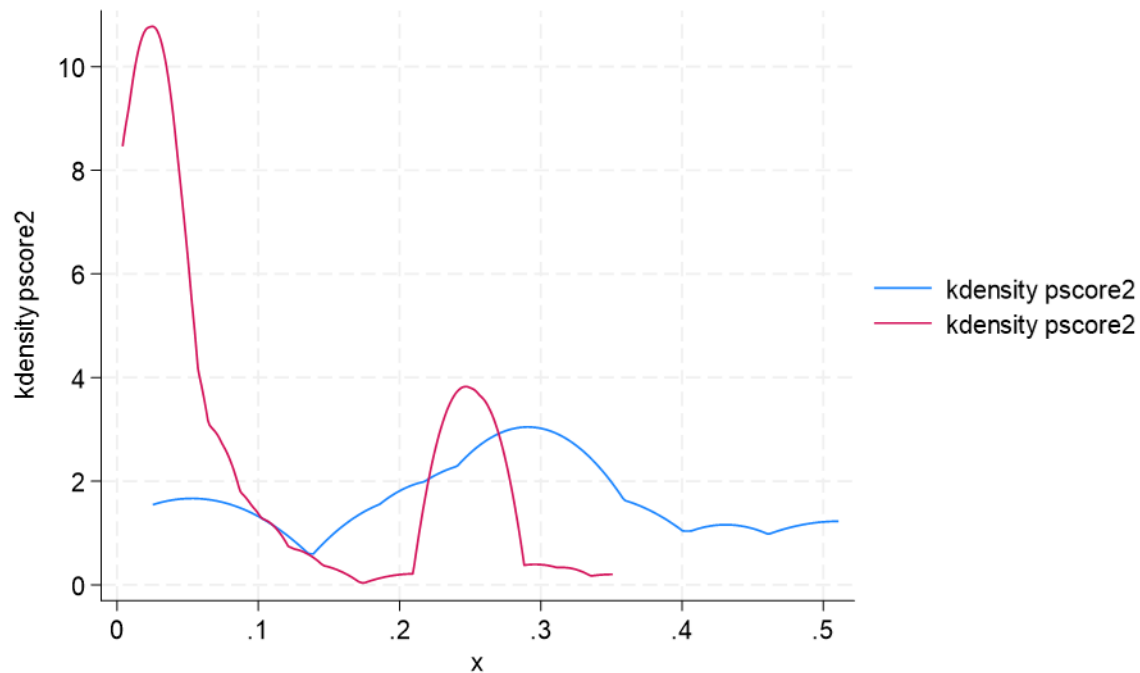
Figure 1: Common Support Validation for treatment variable (*apprenticeship training*) ATR



Note: ATR = 1 (blue) treatment group, ATR = 0 (Red) control group

To complete the test for the assumption for a propensity score matching, the degree of common support overlap of the p-scores generated from the treatment model is very instructive. From the above figure 1, we observe an overlap of the treatment group in blue and control group (non-treated group) in red. The p-scores for the treated group fall between .2 and .8 probability levels, while the untreated group lie within the probability levels of .2 and .8, this shows a corresponding overlap and common support.

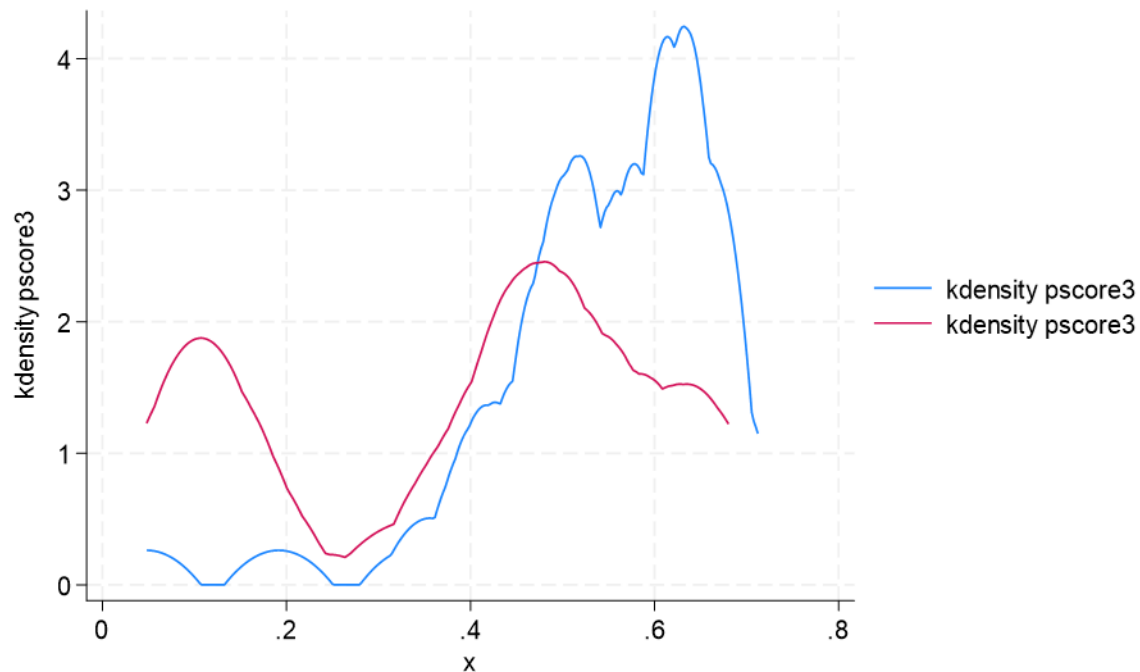
Figure 2: Common support validation for treatment variable (*business inherited from family*) FAM.



FAM (treated) = 1 (blue), FAM (untreated) = 0 (red)

Note: If the p-scores overlap, then it validates the common support assumption. From figure 2, there is an evidence of overlap between the treated units and untreated units. The common support assumption implies that there are individuals in the control group (untreated group) whose p-scores overlap with the treatment group. For PSM to deliver an unbiased estimate there must be reasonable evidence of common support, that is an overlap of the p-scores of the control group and the treatment group. From figure 2 we observe that most of the treated units have p-scores from .2 to .3, whereas most untreated individuals have p-scores ranging from .2 and .3. The goal is to match individuals in the control group with similar p-scores.

Figure 3: Graph of Common Support Validation for the treatment variable (*financial settlement*) STL



Treatment (STL): treated = 1 (blue), Control/untreated = 0 (red)

Source: Author's computation using Stata 18.0

From figure 3 above, we check for the validity of the common support assumption of the treatment variable. There is an overlap of the p-scores from the treated and untreated groups. The blue line indicates the treated group, and the red is the control group or untreated group. In this case, the treated group are those settled financially by their master or mentor and the control group are those who received no financial settlement. Financial settlement by mentor at the end of the apprenticeship training is a major component of the Igbo traditional apprenticeship system. It is the variable that carries the core component of the traditional apprenticeship system. It is on a binary scale, those who were settled by their master responded “Yes” equals 1 and others, not settled by their master responded “No” presented as 0. To this end, we observe an overlap of the blue and red line in the graph above. Although, the figure is not a very good indication of a perfect overlap.

Probit Model; Stata Econometric Software output presented in Table 2.

Column I, Research Question 1 – Treatment variable: Apprenticeship Training (ATR)
Outcome Variable: Average Weekly Revenue Earned (REV)

Column II, Research Question 2 – Treatment variable: Business inherited from family (FAM)
Outcome Variable: Time in Business (TIB)

Column III, Research Question 3 – Treatment Variable: Financial settlement by mentor (STL).
Outcome Variable: Start-Up capital (SUC)

Other Explanatory Variables: Age, Sex, Marital status, Educational Attainment.

Table 2: Results for Probit Model (Stata command: psmatch2).

Variables	I	II	.III
Age	.0004 (.0027)	.0050 (.0039)	-.0010 (.0027)
Sex	1.1053* (.1012)	.2785** (.1433)	1.5025* (.1006)
Marital Status	-.1704* (.0681)	-1.2253* (.0952)	.2258* (.0671)
Educational Attainment	..2715* (.0590)	.5105* (.0965)	.0370 (.0573)
Apprenticeship Training		.5625* (.0950)	-.2585* (.0633)
Financial Settlement by Mentor	-.2065* (.0629)	-.5995* (.1028)	
Business Inherited from Family	.8927* (.1063)		-.8120* (.1168)
Start-Up Capital	—	—	
Time in Business	-.0003 (.0085)		.0027 (.0085)
Average Weekly Revenue		—	—
No. of observations	1,991	1,991	1,991
Average treatment effect on the outcome variable (ATT)	323,381	7.6967	586,327
Likelihood Ratio	269.54	388.41	377.44
Chi-squared			
Prob. Chi-squared	0.0000	0.0000	0.0000
Pseudo R-squared	0.1027	0.2886	0.1373

Source: Author's computation using Stata 18.0

Significance level @ *1%, **5%, ***10%, Standard error in parenthesis

Discussion of Results

Table 2, Column I is the result of the empirical analysis for the first research question; the effect of apprenticeship training on the average weekly revenue earned by an entrepreneur. The positive likelihood ratio (Chi-squared) and the probability level (0.0000) indicate that the model is a good fit. Explanatory variables @ 1% level of significance include sex, marital status, educational attainment. Some of the individuals who passed through apprenticeship training also inherited business from their families and received financial settlement from their mentors. For the purpose of this analysis, what is most important is the value of the average treatment effect on the outcome variable. The ATT score measures the average treatment effect of apprenticeship training on average weekly revenue earned by an entrepreneur, which is positive, and equal to 323,381 Naira. This finding supports the literature in Agu & Nwachukwu (2020), Ekesiobi & Dimnwobi (2021) and Oregiu & Nafiu (2014) stating that participating in the Igbo traditional apprenticeship system improves revenue earned by an entrepreneur. On the other hand, there are Igbo entrepreneurs who did not pass through the apprenticeship process, but do very well in business, especially those who inherited businesses from their families or honed their skill through formal education before venturing into private business (Obunike 2016).

We conclude that participating in the apprenticeship training increases revenue by N323,381 Naira, and reject the null hypothesis that apprenticeship training has no significant relationship with the amount of revenue earned by an entrepreneur.

Column II shows the result for the second research question, which estimates the extent of family relationships on business survivability. The average treatment effect (ATT) of the treatment variable (business inherited from family) on the outcome variable (business survivability or time in business) is equal to 7.6967 years. This implies that the business inherited from family survives an additional 7.7 years compared to others. Suffice to say that a critical factor in the survival of the Igbo business model is support from family. We therefore reject the null hypothesis that business inherited from family has no significant relationship with the number of years in business. This is given that all other factors are held constant, and there are other unobservable factors which may affect the behavior of the treatment variable that are not captured in this estimation.

This finding is in tandem with the expectation that family inheritance is a key factor in the growth and survivability of a business. This finding corroborates Ajaekwe (2008), Agozino & Anyanike (2007), Igwe *et al.* (2018) stating that Igbos have the habit of growing family businesses through sending their children to learn trading skills from successful members of the community. Brautigam (1997), reveals that Igbos have the lowest business failure rate among all the other ethnic groups in Africa. The Igbo business survivability rate is high, due to the fact that they are nurtured from family. The act of family inheritance inculcates a natural skill from birth that blossoms into success upon maturity.

Similarly, Agu & Nwachukwu (2020), Igwe *et al.* (2018) and Ukaegbu (2003) have argued that the Igbo entrepreneurial culture is rooted in the family, transfer of family wealth and traditional skills are the backbone of the Igbo entrepreneurship system. This assertion does not exclude the possibility of new businesses becoming very successful, while those inherited from family collapse due to mismanagement (Iruoma, 2021; Igwe *et al.*, 2020).

For the third research question, we examine the core component of the Igbo traditional apprenticeship system, which is rooted in the mentor – mentee relationship. Traditionally, after the

mentee has served his apprenticeship with the master or mentor, there is an informal agreement, which subsists; that the mentor will provide financial assistance to set up the mentee's business. Sometimes the mentor leaves the existing business for his mentee to set up another branch of similar business, where he recruits another set of mentees to run the business with him. In this case, the mentor relinquishes both business capital and customers for his mentee to continue in the same line of business. Here, we measure the core component of the apprenticeship system of the Igbo society by asking respondents – whether they received financial settlement from their mentor at the end of the apprenticeship. The binary response of “Yes or “No” becomes the treatment variable, and the outcome variable is the amount of start-up capital that the mentee received to start up his own business. The expectation is that those who received financial settlement from their mentors would have more start-up capital at their disposal than those who received no financial assistance.

From Table 2, column III above we observe that the treatment variable is whether the individual received financial settlement from master or mentor (STL) and the outcome variable is the amount of start-up capital (SUC). If the individual was settled by master that means he falls into the treated group, and if he was not settled he falls into the untreated group

All the explanatory variables in Table 2, column III are significant at 1% level except Age, Education and Time in Business. The insignificant variables are not relevant factors in determining whether a mentee receives financial support or settlement from the mentor. The average treatment effect $ATT = 586,327$ indicates that on the average the entrepreneur who received financial support or was settled financially by a mentor has approximately N586, 327 (five hundred and eighty-six thousand, three hundred and twenty-seven Nigerian Naira) increase in start-up capital. This finding implies that an entrepreneur who was settled by his mentor or master is most likely to have an increase in start-up capital between N586,327 above any other entrepreneur whose master or mentor did not settle, given all other factors held constant. This finding supports the results in Obunike (2008), on fundraising for start-up through the financial settlement by a mentor, Igwe *et al.* (2018) stated that providing capital for start-up under the traditional apprenticeship system improves financial success and business development. In the same vein, Halliru (2013) contends that under the Igbo apprenticeship system, financial settlement by the master sustains the Igbo entrepreneurial spirit and culture. The result also aligns with Agu & Nwachukwu (2020) to the extent that the Igbo entrepreneurial model, exemplified by the mentor-mentee relationship, culminates in the financial settlement by the mentor to the mentee to start up his own business, which drives the potential and intention of the entrepreneurial culture.

However, some scholars argue that the mentee relying on the financial support from a mentor limits the potential for growth and performance in business (Dana & Ratten, 2017). Nonetheless, the general notion is that an entrepreneur with limited resources, both internal and external, is constrained.

From the result in column III, it is obvious that the apprenticeship culture, which is signified in this case by the financial settlement from the mentor to the mentee is very significant in determining the amount of start-up capital available to the mentee. There is a positive significant relationship between financial settlement by the mentor and the amount of start-up capital available to the mentee. To this end, we reject the null hypothesis that apprenticeship culture of financial settlement by mentor has no significant relationship with start-up capital.

From the literature (Ekesiobi & Dimnwobi, 2021; Ukaegu, 2003; Agu and Nwachukwu, 2019) the apprenticeship culture is driven by a mentor – mentee relationship and the core evidence of this relationship is an unwritten agreement between the mentor and mentee for a moral and financial support at the end of the apprenticeship program. The mentor has a duty to provide financial assistance and moral support to the mentee after serving him for many years. To this end, there is ample evidence from the findings in Table 2, Column III, that the financial settlement received by a mentee from the mentor increases the amount of start-up capital.

The findings of this study supports the entrepreneurial event model by Shapero & Sokol (1982), which postulates that the event of entrepreneurship is influenced by social factors comprising of cultural constructs. In the same vein, the theory of planned behavior espoused by Ajzen (1985) is equally supported by empirical evidence from this study. Noting that the efficacy of entrepreneurial intentions is the self-acknowledged desire of anyone willing to setup own business and guided by three basic constructs of perceived visibility, perceived desirability and the propensity to act (Agu & Nwachukwu, 2020).

CONCLUSION

From the empirical analysis above, we find that the Igbo entrepreneurship model is rooted in a traditional apprenticeship system that enhances business revenue, business survivability and the amount of start-up capital available to an entrepreneur who has passed through the program. The study further reveals that the Igbo entrepreneurship model possess all the attributes of stakeholder capitalism – an economic system of value creation for shared prosperity, through a mentor-mentee relationship, as opposed to value-capture, which is inherent in traditional capitalism.

Although the Igbo entrepreneurship model has been positively appraised in the literature, there are still challenges that opens the system for criticisms and possible improvement. Some scholars argue that the lack of government oversight encourages abuse of the mentee by a mentor. At the end of the apprenticeship period the mentor may not fulfill the obligation of providing start-up capital for the mentee. However, others argue that allowing government intrusion may impede the traditional seamless process that has been existing for centuries.

Another major challenge is the lack of access to credit, which is a fundamental problem of small-scale enterprises in developing countries. Many financial institutions require collateral and established credit profile in order to lend money to small businesses in Nigeria. These small-scale entrepreneurs do not have the credit profile or collateral to access credit from financial institutions, as a result they lack the necessary capital to start-up. Some apprentices who unfortunately did not benefit from their mentor or master in obtaining start-up capital end up as middlemen, running around for wares in the marketplace and selling at prices above market price. This is often referred to as “*Igba oso ahia*.” Often times these individuals will take some time to make the money required to set up shop.

There is also, a lack of adequate information and data resources to capture the performance of entrepreneurs groomed under the Igbo apprenticeship system. The paucity of data creates information asymmetry, which negates the ability of government to implement policies to support the scheme and further improve the economic base of participants. Similarly, data constraints make it difficult to ascertain the overall significance of the model with respect to other methods of

business start-ups. However, there is a general assumption that majority of the Igbo businesses that exist today and spread all over Nigeria, and across the World are products of the Igbo support system. Given the fact that credit and financial constraints are obvious limitations to business success in Nigeria, the Igbo country figured out a sustainable means of improving their economic well-being through the apprenticeship system reflecting a model of stakeholder capitalism. The Igbo society being an individualistic society cultivated a culture of *love thy neighbor as thyself*, to propel a communal system of shared prosperity, where no one is left out in the dark to figure out how to survive.

In the building blocks to socio-economic equilibrium in any society, understanding the political economy of that society is very fundamental. Many indigenous societies can learn from the Igbos in building a system that encourages shared prosperity. In the literature we find that some communities do not encourage entrepreneurial growth because the period of mentor-mentee relationship is indefinite, unlike the Igbos that hold the prosperity of the community above their individual prosperity. Many feudal communities in Africa do not provide the requisite moral and financial support to an apprentice like the Igbos. We therefore recommend that other ethnic groups should be encouraged to emulate the Igbo traditional apprenticeship system to enable a broad-based support for skill acquisition, business development for economic growth and prosperity.

In addition, government should endeavor to capture the successes of these entrepreneurs into the formal economic system by providing the necessary incentives for growth. A good government policy could generate taxes from these businesses while at the same time encouraging growth through small business development programs.

Future studies on the Igbo entrepreneurship system should disaggregate the available skill sets to find areas that Igbo businesses have comparative advantage, and are more inclined to receiving support for development. This study did not decompose the various skills and crafts, rather all the individuals were examined from the aggregate of general trade. Understanding specific trade engagements will provide the opportunity to decipher areas that policy makers will channel attention for improvement. At the national level, government policy should be implemented to reduce the level of hostilities arising from ethnic sentiments in Nigeria. Recent xenophobic attitude by members of other ethnic groups against the Igbos pose a serious threat to entrepreneurial development. The Igbo resentment by other ethnic groups significantly affect the growth of the national economy, since Igbos have a stronghold on the growth and development of small and medium scale enterprises in Nigeria.

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